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A Monthly Educational Journal.

E. E. WHITE, EDITOR.

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CONTENTS.

PAGE.

Arithmetic, Logical Outline of. By Edward Brooks..... 8
Æsthetics of the Schoolroom. By Delia A. Lathrop..... 16
American School System at Vienna, The..... 27
Ancient Greece, Education in. By W. H. Venable..... 43
Admission of Girls to American Schools, First 60, 179
Absenteeism and Illiteracy Increasing? Are 101
Austrian Congress of Teachers..106
Ability or Taste?.....140
American Recognition of Women as Teachers, First.....182
Articles, Long and Short.....221
Ancient Teachers.....258
Agricultural Colleges ...262, 461, 462
American Institute of Instruction, The 270, 438
Agricultural Colleges, Dr. McCosh's "Attack" on.....460
Anti-Rod Experiment in New York City, The.....183, 503
Book Notices, 35, 75, 115, 152, 193, 234, 272, 310, 438, 475, 510
Book Notices, Our.....219
Boston Primary Schools.....217
Bible Question, New Light on the 260
Blackstone in Education, The Want of a 463
Childlike Spirit in the Teacher. By A. D. Mayo..... 1, 39
Compulsory Education, Beecher on..... 23
Chinese movement, The New... 25
Chicago Experiment, The..... 25
Corporal Punishment....25, 150, 180, 504
Correspondence and Queries.33,113
Crust of the Earth and Below, The. By T. C. Mendenhall..53,163
Connecticut Normal School, The. By I. W. Andrews.....107
Compulsory System 103, 230, 261, 320, 508
Common School System of Baden, The. By W. H. Young, 119, 157, 197, 275, 479
Composition, Instruction in. By A. D. Mayo.....125
Composition and Language.....140

PAGE.

County Supervision 141, 148
Catholic Opposition to Compulsory School Attendance.....183
Centre of Population in the United States, The.....223
California Experiment, The 191, 224
"Cramming" 222
Cramming for Examinations. By Ruth C. Wainwright.....255
Co-education in Cornell and Michigan Universities.....261
Co-education, Discussion on.....262
Conducting Recitations, Methods of.....263, 303
Common School Historically, The. By David Putnam.....345
Catholics on Public Schools, The.472
Courses of Study for Ungraded Schools 189, 222, 501
Colleges and Universities, 30, 32, 33, 69, 70, 74, 148, 189, 191, 219, 230, 306, 307, 309, 310, 472, 474, 506, 508

Contributors, Names of—

E. B. Andrews..... 84, 183, 208, 494
I. W. Andrews..... 107
J. B. Angell..... 338
John Bolton..... 448
Edward Brooks..... 8, 131, 244, 441
R. T. Cross..... 50
G. N. Carruthers..... 177
E. S. Cox..... 290
Hannah Clarke..... 291
U. T. Curran..... 319
Adolf Doual..... 11
Arthur Forbriger..... 339
Samuel Findley..... 339
J. C. Greenough..... 94
W. D. Henkle..... 46, 96, 165, 252, 489
H. F. Harrington. (Selected)..... 281
Thomas W. Harvey..... 413
Harriet L. Keeler..... 128
G. Dallis Lind..... 213
Delia A. Lathrop..... 16, 256
A. D. Mayo..... 1, 37, 125, 487
T. C. Mendenhall..... 53, 163
William Mitchell..... 361
John Ogden..... 20
W. H. Parcels..... 58
David Putnam..... 345
Andrew J. Rickoff. (Selected)..... 444
R. W. Stevenson. (Selected)..... 139
Sarah C. Sterling..... 137, 175, 285
E. A. Strong..... 373
Eli T. Tappan..... 113
M. S. Turrill..... 406
W. H. Venable..... 43, 204, 248, 327, 451
A. D. Williams..... 90
Mrs. A. G. Webster. (Selected)..... 237
S. H. White..... 455
William Warren..... 492
Ruth C. Wainwright..... 255, 497
W. H. Young 68, 79, 119, 157, 197, 275, 479

Drawing. By Walter Smith..... 21
Drawing in Common Schools. By J. C. Greenough..... 94
Decline in Classical Enthusiasm.300

PAGE.

Drawing in the Public Schools. By Arthur Forbriger.....339
Drawing in Massachusetts.....462
Death and Life. By A. D. Mayo.487
English Grammar 62, 142
Elective Courses of Study.....103
Educational Notes. By Edward Brooks.....131, 244
Examination of Pupils, The. By R. W. Stevenson.....139
Educational Journalism.....138, 182
Education of Children Abroad, The 181
Examination Questions.....293
Experience as an Eye-Opener...298
Expression the Test of the Pupil's Knowledge.....462
"Educationist" 500
Eliot's Opinion, President.....503
Free High Schools in Maine.....260
Fact and Fiction in Teaching. By Hannah Clarke.....291
Female Principals.....308
Geography and the Muses. By E. B. Andrews..... 84
German School System, Prof. Young on the...100, 180, 219, 501
Graded Schools, Two Defects in..143
Geology in the Public Schools. By E. B. Andrews.....208
Geology, the Teaching of 217
German in Public Schools...222, 308
Grammar as a School Study.62, 223
Good Writing. By E. S. Cox.....290
Harvard Examinations for Women..... 70
Home Study, Public Opinion on.142
Hints from Practice. By G. N. Carruthers 177
Half-Time System, The.....180
Higher Education and the State, President Andrews on.....300
Henry Heikel's Address.....383
Illinois Provision respecting the Natural Sciences, The..... 61
"Is Owing To." By W. D. Henkle 96
Industrial Element in Education 102
Inaugural Address. By U. T. Curran 319
Illinois Experiment, The 459
Institute Campaign in Ohio, The.467
Jubilee Singers 149, 501
Japanese and Chinese Indemnity Funds 30
Kindergarten—What is It? The. By A. G. W.....237
Kindergarten. The.....125
Language Lessons.....24, 90, 100, 338

PAGE.

Lessons in Language, Hadley's. By A. D. Williams 90
Language, Training in the Use of. By Harriet L. Keeler.....128
Moral Training in Public Schools 61
Monitorial Discipline in English Public Schools..... 63
Moral Instruction in Public Schools...61, 186, 425, 481, 501, 502
Marking System, The.....222
McGuffey, William H., Dr.....230
Mental and Written Arithmetic, Union of.....301, 499
Moral and Religious Instruction in Public Schools. By Samuel Findley.....389
Monarchical School Systems.....459
Mental Arithmetics a Humbug. By W. D. Henkle.....489
Moral Instruction in the Cincinnati Schools.....499
New Dress, Our..... 22
National Bureau of Educa'n, 22, 508
National University, The..62, 149, 426
Normal Schools, Gov. Noyes on 68
National Educational Association.....71, 231, 266, 386, 427
Normal Instruction,.....141
Nay and No; Yea and Yes. By W. D. Henkle.....165
New School Law of Ohio....186, 226
National University, President Eliot on a.....426
Natural Science Teaching in the Common School. By W. H. Venable 327
Natural Science in Illinois Common Schools. By S. H. White 455
Normal Schools and Academies 30, 70, 189, 190, 309, 471, 506
Objects of the Recitation, The By R. T. Cross 50
Ohio and Michigan Associations 106, 186, 232, 308, 313, 386
Ohio at Vienna.....108
Ohio School Record for 1872.....145
Ohio Superintendents' Association.....187, 389, 425
Oral Teaching. By H. F. Harrington.....281
Oral and Text-book Methods, Union of.....299
Orthography, Neglect of.....299
Ormsby's Map-Drawing Scale...307
Opening Addresses at Put-in-Bay.....318
Obscene Literature.....461
Oral Spelling, Class Drills in.....467
Parsing, "Tall".....302

PAGE.
Public Schools of Cleveland, A Visit to the. By Adolf Douai.. 11
Physical Training in Boston Schools.....102
Primary School, One Week in a. By Sarah C. Sterling.....137, 175
Primary Reading.....180, 463
Pauper System of Education, The.....184
Put-in-Bay Meeting, The...186, 228, 308, 386
Plato and Education. By W. H. Venable.....204, 248
Primary Reading. By Delia A. Lathrop.....256
Percentage System, The. By M. S. Turrill.....406
Philosophic Study of Literature, The. By J. B. Angell...338
Proper Course of Instruction and Practice for Teachers, A. By William Mitchell.....361
Preparation for the High School. By E. A. Strong.....373
Primary Instruction, System in By Edward Brooks.....441
Preparation for Teaching. By John Bolton.....448
Plato's Republic, Paragraphs from. Selected by W. H. Venable.....451
Physical Geography. By E. B. Andrews.....494
Pagan Sanctions of Moral Obligations.....500
Power of Boards of Education respecting the Studies of Pupils.....502
Rhode Island Institute of Instruction..... 71
Reading, Hints on the Teaching of. By Sarah C. Sterling.....285
Religious Instruction in German Schools. By W. H. Young...470
Religious Instruction.....324, 499
School Postoffice, A..... 23
School Commissioner's Conference, Ohio..... 30
Sycophant? What is a. By W. D. Henkle..... 46
Syllables in Spelling, Pronouncing the. By W. H. Parcels... 58
Separate Schools for Colored Youth Legal..... 60
School Statistics, A Misuse of 101, 140
Should American Youth be Educated Abroad. By B. G. Northrop.....171

PAGE.
Spelling, The Result in.....142
School Theatricals.....178
State and Education, The...426, 507, 508
School Instruction in Baden..177, 217, 301, 501
Suspension from School as a Punishment.....221
Short Paragraphs.....298
Smallness of New England Families.....301
Secretary's Minutes of Put-in Bay Meeting.....313
Studies the Pursuit of Which the State should Encourage. By Thomas W. Harvey.....413
School Hours for Children under Ten. By Andrew J. Rickoff...444
Small Colleges, Advantages of...502
School Intelligence,—United States.29, 30, 31, 71, 73, 107, 113, 150, 151, 190, 191, 192, 232, 268, 272, 306, 308, 437, 438, 440, 475, 506, 508
School Intelligence,—Other Countries..29, 69, 106, 148, 189, 230, 268, 307, 506, 507
Teachers' Institute, New Features of a. By John Ogden.... 20
Teacher's Spirit, The..... 22
Toledo University of Arts and Trades..... 32
Two Per-Cent Reserve Fund... 70
"Tunding" in Eng. Schools..63, 191
Two Questions. By Eli T. Tappan.....113
Tom Tudor's Diary.....169
Teacher's Knowledge, The.....179
Teachers' Institutes, Management of.....184, 220, 258, 259, 392
Teachers' Institutes, A Country Teacher's Opinion of. By G. Dallis Lind.....213
Theory and Practice, Answers to Questions on.....269
"Theory".....302
Titles, The Use of.....462, 507
Third Volume, Close of.....505
Vienna Exposition149, 190, 387, 437
Ventilation, Hints on. By Ruth C. Wainwright.....497
Ventilation of Schoolrooms.....503
Written Examinations.....222
Words not in the Dictionaries, A Few. By W. D. Henkle.....252
Works on Teaching.....464
Writing in Country Schools.....464
Writing in Our Schools. By William Warren.....492

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THE CHILDLIKE SPIRIT IN THE TEACHER.*

BY REV. A. D. MAYO.

I sat one day, a year ago, in one of your rooms while a lesson was given to a class by a teacher you all know. She was in one of those inspired and inspiring moods of instruction when the little ones are fully aroused, and, like a flock of twittering birds, are all about and over their beloved mistress, so that it is not always certain who is teacher, and who are learners. For now and then some little boy or girl would start up into a strange prophecy of manhood or womanhood, and the woman who held them all in her hand, would subside to a little child. As the lesson closed I found myself repeating over and over, unconsciously, the words spoken eighteen centuries ago by one who "knew what was in man:" "Verily I say unto you, *unless you become like little children, you cannot enter into the Kingdom of Heaven.*" These words sum up the whole significance of all the true religion there ever was on this earth. They include the whole science of your life as teachers in the American common schools. Permit me to speak a word to you to-day on *the childlike spirit in the teacher.*

What is science, of which everybody is now talking? This material universe, as seen by the creative mind of God, and sung about by the creative soul of man, is a sublime poem, perfectly beautiful and harmonious, the offspring of the Divine

*An address to the pupils and graduates of Cincinnati Normal School.

Father of all. We, on the other side of creation, look up to it with our reasoning and observing faculty, and discover that this poem is constructed according to a marvelous law of development, and is not only perfect art, but perfect logic and mathematics. So we make a skeleton of nature indicating these laws and methods—not that God made the world according to Humboldt's or Huxley's chart, but everything true science finds in creation is also in the Supreme Mind, while beyond it the infinite soul extends and fills all the eternity of time and space, and is the Father of all.

A Shakspeare, an Angelo, a Beethoven speaks into immortal life a Hamlet, a dome of St. Peter's, a pastoral symphony. It was in his soul at first a germ; it grew, gathered all its own unto itself; at last was born complete. The great critic, a Coleridge, a Schiller, a Ruskin, looks at it and describes the immutable laws of the imagination by which it was formed; but no man could build up such a work by mere obedience to these laws. If men do anything great or good, the act is from some elevation and inspiration of the whole man. It is a good thing for all men to know the track by which that manhood reached its goal; but nobody need expect to do the same thing by simply knowing the road; he must rise up in the might of his manhood, and walk the marvelous highways of life for himself.

When we speak of "methods of teaching," we mean the same. A woman is endowed with a nature pitched on the key of childhood. She may contain all the science, all the method of libraries and the schools; but everything that goes into her soul becomes vital, living power, and when she comes to her class she seems to the children a sort of glorified child—one among them and yet above them—as they imagine the children that have died and gone to a higher world. The moment her soul touches her class, all the doors of all her treasure houses of wisdom, experience, knowledge, fly open. She communicates knowledge as naturally as she speaks. She awakens the faculty in every child to see what is in her mind. She says and does a thousand wise and beautiful things half conscious of what she does, and when she closes her lesson every receptive scholar has made one step forward toward mature life—a step it can not lose through eternity. We stand before this wonderful spectacle and write out a rough chart of the ways by which she does this work, *i. e.*, such of them as we are able to discover. This chart we call the "science of instruction," and teach it in normal

schools. What we call the objective system of teaching is only the way every good mother teaches her little child the common things of life. All true methods of instruction are the attempt to reproduce the methods by which a man or a woman who loves and comprehends children, imparts everything in a spirit of enthusiasm and self-sacrificing consecration to their good.

So, remember, young ladies, that the great end of all that your teachers are doing here for you—this drill, this practice, this going over of methods in every science—is to awaken your womanhood, to put a wise, pure, refined, enthusiastic young woman into the midst of every schoolroom of this city. You can come up to all this from the outside; commit these methods to memory, imitate the ways, even the tones of voice and motions of your teachers, and yet be on the one side of a chasm far more hopeless than the "bloody chasm" the statesmen talk of. Or you can come up here day by day, with a fire in your hearts and a glow in your minds, and be molded and developed by all you see and hear and do this year, into women capable of doing for children what these faithful teachers are trying to do for you.

And this will be the test of your success here and in the schoolhouse. If you are growing daily more a child yourself; more simple, natural, sincere, more eager to know the truth, more open to be inspired and lifted above yourself by every great and good spectacle in life; if you love children better and understand and are able to guide them more easily every day; if under this teacher's life, toilsome as it is, you are growing into nobler, more lofty, gracious and influential young women everywhere; if life appears to you every month a grander opportunity to lead forth your little ones into wisdom and virtues; then you have found out the secret of your own and every profession. And that may be all summed up as the "childlike spirit" whereby the noblest man or woman can come to the least child and take it up into his own soul and bear it on as the ocean at flood-tide whirls along a myriad little waves, flashing and clapping their sun-lit hands above its irresistible flow.

But do not fancy you can get at this childlike spirit by being childish or aping the manners and speech of children. All the great books, like Pilgrims' Progress, Robinson Crusoe, The Arabian Nights, Dickens, that children sit up nights to read, were written for grown people. But they were written in the same spirit of enthusiasm, faith, and abandon with which

every school boy bounds off to his base ball ground. So people of all ages become young together as they read them. Nothing so disgusts and demoralizes a right-minded child as to see a teacher become purile and silly and unnatural, trying to stoop to its supposed condition. Children do not desire that their elders should be altogether like themselves. They wish to feel that their teacher or parent is the wisest and strongest, handsomest and most famous person in the world, yet so kind and loving and patient that he can understand and explain everything to them. They want you to be like the ocean, when they were at the sea shore, where they loved to play on the edge of some little bay; to wade in the shallow brine, and push their little boats all about the fairy realms; now and then pausing in awe as the mighty old sea outside came surging in upon them, or thundered along a whole line of mysterious coast; and now and then climbing up to the great rocks and looking off on a horizon of azure waters, flitted over by countless sails. They want you to feel you are all sufficient for their needs, yet one of them, as long as they are good enough to deserve your favor. When I was a boy we had one schoolmaster who went out with us all at recess, "snow-balled" and "slid," and did everything of the kind better than any of us; but when the bell rung, he was as truly our master as Napoleon at Austerlitz. The next year a young sprig of Harvard came up to us, and proposed to do the same thing. We took his measure quietly for a week; then at a given signal, one day, he was suddenly blinded by a shower of snowballs, tripped by one big boy, held down by another, buried under an avalanche till the girls came up and stuck his umbrella, with his bandanna tied to it, over his mausoleum, and all adjourned homeward. The first man had a big boy in his soul, and the boy loved to play with us; and the boy and man were one. The other was a spoiled child whose manhood had not "come to time;" a pedant fit only to be buried in snow drifts. Be very careful you do not ape childhood; for every child will see you are a humbug and act accordingly.

You can only gain the true childlike spirit by the consecration of your whole womanhood to the work in which you have embarked. Every young woman loves some child with her whole heart, and is able to make it love her, and to do something good and great for it. Now the problem that Miss Lathrop has in hand, in behalf of the city of Cincinnati, is to enable

you to love fifty children of as many types of character, parentage, and degrees of agreeable or disagreeableness, as well as you love that child; so that you can rejoice to sacrifice yourself for them, teach them, bear with them, and leave them all a little ahead at the end of each year. And through this you are learning to love childhood itself, to look on it with wonder, and joy and faith; to feel it is the grandest work on earth to stand just where you do and work as hard as you can; to feel proud of your glorious country; to feel that you are making here the citizens that rule all these "first assistants" of the people we call Governors, and Senators, and Presidents. The day on which you understand that this is what you are set to do, will be your new birth into your real life as a real teacher of children.

As soon as you feel this childlike spirit coming, receive it as a gift from God. Cherish it and keep it pure, unselfish, free from all womanish vanity, or whims, or falsities. Watch all the good mothers you know when with their children. Your own mother, toiling at home to enable you to come here, and your dear old grandmother, sitting half blind in her chair, with her grandchildren about her knees, may teach you more than all of us in this radical "method" of your success. Watch children at their play and at home. Try to understand their trials and temptations, their way of looking at things. Don't be ashamed to become as excited and visionary, once a week, as the flightiest little flaxen-haired girl in your classes. While you hold fast by the anchor of your consecrated womanhood to the great sanctities of life, let yourself float freely among all the children you know. In this way—and a great many others I have not time to speak of, but you can discover—you will open yourself to the incoming of this spirit, which, like every "Holy Spirit," bloweth like the wind, whence or whither we do not know. But gradually you will feel at home with children, and they will set towards you as naturally as the light comes up the morning sky.

This spirit may be increased indefinitely. Says Frederika Bremer: "The human heart is like heaven; the more angels, the more room." The more you love and work for children, the more you can. Every good grandmother in America is miserable unless she can "bring up" her children, all their husbands and wives, their children, and the great-grandchildren after them, as long as she can see the coming generations. So you will never become tired as long as you really are possessed by this childlike

spirit, and observe the sacred laws of physical and spiritual health in your daily life. The reason so many schoolmistresses look twenty years older than they are, and are sick and petulant, and a terror to manhood, is, that they have not been "born again" into this childlike spirit. They *work at* children from the outside; cold, or selfish, or capricious, and life becomes a greater burden every day they stay in school. Everything depends upon whether you are outside or inside in your relations to a child. One night last summer on a Sound steamer everybody was wearied and fretted by the wailing of an infant in the cabin that was carried about by a shaggy, rough, burly man. Finally, one passenger cried out, "Is that your brat that is keeping us all awake?" "No," said the tired old fellow, "not mine, but a little baby whose father and mother died last week in New York, and I am taking it to my old woman to bring up with our ten little brats at home." In five minutes a dozen women were trying to get at the baby; the "last speaker" was pushed into the best state-room to sleep, and the "brat" was king of that boat the rest of the night. It's all in the way of looking at the thing. If you can look at children as God looks at all of us, you will become women in teaching them, and each of you, in some world, will be permitted to write her little golden book—"What I know about being an Angel."

Until you get into this childlike spirit your knowledge and methods will be only a burden and a delusion. A school-house full of children can grow up into good men and women in a "dame's school" in a log shanty, if the dame is a genuine woman and fills them with the desire to know more than she does. But heaven preserve us from those female portents, who stride into the schoolroom clad in science and philosophy like armed men, with no womanhood in their hearts and no love for childhood gleaming from their eyes. "All things are vain without love," says an old authority. A man's manhood, a woman's womanhood must fuse and sanctify all their knowledge and direct all their methods; or their work is in vain and their science is the emptiest of shams. There is no fear that you, young women, will be spoiled by education of the highest type; be unfitted by school teaching for the noblest office of wife and mother; provided the womanhood, the childlike spirit, is kept all the time perpetually alive. Every girl in Cincinnati knows too much if she is not a genuine girl; no woman knows half as much as the gentlest woman ought, if she is a gentlewoman

indeed. Your childlike spirit of faith and devotion and enthusiasm, and longing for the highest everywhere will vitalize your studies, and make you, not "blue stockings," but more exalted women the more you learn.

And such work as this in the schoolroom is the noblest of all preparations for true American wifehood and maternity. The West is full of glorious wives and mothers, leaders in every good word and work, who came here from every country in the world to "keep school," and kept school so beautifully that the best unwedded man in the place finally broke up her plans and sent her home "to fix to get married," as they say down East. And you young women of this Normal School are not only learning here to be teachers, but to be also the future companions of the noble men who, with you to inspire and help them, will guide the destinies of this mighty West that rules the Republic.

But don't go into school with one eye out of the window all the time to see if a coach and four is driving up to take you off into a palace in Clifton. Go in, all that is of you; turn your back on the whole world; let this room of fifty children be your world and let your ambition in life and your hope in Heaven be all bound up in your daily toil with them. Don't fret about want of appreciation or about your salary. Of course get all you can—and it will be small at the best. But did Abraham Lincoln and Florence Nightingale do their work for the pay? Does anybody that is anybody expect to get any reward in money for the best things he does? Has your mother put in her bill for services rendered you from the age of one to six, inclusive? No, no, young women, all these side issues must be put out of your minds that your hearts may "have free course to run and be glorified" in your work. It is the highest work on earth, except that for which it is the preparation, the maternity of souls and the sisterhood of humanity. Put yourself altogether into it, and Providence will lead you, in due time, to do your best things, in the place in all the universe best for you.

(*To be concluded next month.*)

——THE facts which a child learns at school are of less practical value than the habits of thought and feeling which he acquires. The mental act is more important than the acquisition.

A LOGICAL OUTLINE OF ARITHMETIC.

All numerical ideas begin with the unit. It is the origin, the basis of Arithmetic. From it as a fundamental idea originate all numbers and the science based upon them. Beginning, then, at the Unit, let us see how the science of Arithmetic originates and is developed.

The Unit can be multiplied or divided. This gives rise to two classes of numbers, Integers and Fractions. Integers originate in a process of synthesis, Fractions in a process of analysis. Each Integer is a synthetic product derived from a combination of units; each Fraction is an analytic product derived from the division of the unit. There are, therefore, two general classes of numbers, Integers and Fractions, treated of in the science of Arithmetic.

Having obtained numbers by a combination of units, we may unite two or more numbers and thus obtain a larger number by means of synthesis; or we may reverse the operation and descend to a smaller number by means of analysis. Numbers, therefore, can be united together and taken apart; they can be synthetized and analyzed; hence Synthesis and Analysis are the two fundamental operations of Arithmetic. These fundamental operations give rise to others which are modifications or variations of them. Arithmetic, therefore, from its primary conceptions, consists of but two things;—to increase and to diminish numbers, to unite and to separate them. Its fundamental operations are Synthesis and Analysis.

To determine when and how to unite and when and how to separate, we employ a process of reasoning called Comparison. This process compares numbers and determines their relations. Synthesis and Analysis are mechanical processes; comparison is the thought process. Comparison directs the original processes, modifies them so as to produce from them new ones, and also gives rise to other processes not contained in the original ones. It is, in other words, by this thought process working upon the idea of number, that the original processes of synthesis and analysis are directed and modified, that other processes are developed from them, and that new and independent processes arise, and the science of Arithmetic is developed. Comparison, therefore, in Arithmetic as in Geometry, is the process by which the science is constructed, the process by which the learner unlocks its rich storehouse of interest and beauty.

Arithmetic, it is thus seen, consists fundamentally of three things: Synthesis, Analysis, and Comparison. Synthesis and Analysis are fundamental operations, suggested in the formation of numbers; Comparison is the fundamental thought process which controls these operations, eliminates their potential ideas, and developes other divisons of the science growing immediately out of itself. Let us examine these processes and see the number, nature and relations of the divisions growing out of the fundamental operations, and thus determine the logical character of the science of Arithmetic.

SYNTHESIS.—A general synthesis is called *Addition.* A special case of the synthetic process of Addition, in which the numbers added are all equal, their sum receiving the name of product, is called *Multiplication.* The forming of *Composite Numbers* by a synthesis of factors, which may be called *Composition; Multiples*, formed by a synthesis of *particular* factors; and *Involution*, by a synthesis of *equal* factors, are all included under Multiplication. Hence, since Involution, Multiples, and Composition, are special cases of Multiplication, and Multiplication is itself a special case of Addition, the process of Addition includes all the synthetic processes to which numbers can be subjected.

ANALYSIS.—A general analysis, the reverse of Addition, is called *Subtraction.* A special case of Subtraction, in which the same number or equal numbers are successively subtracted with the object of ascertaining how many times the number subtracted is contained in another, is called *Division. Factoring* is a special case of Division in which many or all of the factors of a number are required; *Evolution* is a special case of factoring in which *one* of several *equal* factors is required; and *Common Division* is a case of factoring in which some *common* factor of several numbers is required. The process of Division, therefore, includes the processes of Factoring, Common Division and Evolution, and since Division is a special case of Subtraction, all of these processes are logically included under the general analytic process of Subtraction.

COMPARISON.—By comparison the general notion of relation is attained, out of which arise several distinct arithmetical processes. By comparing numbers, we perceive the relations of difference and quotient, and giving measures to these we have *Ratio.* A comparison of equal ratios gives us Proportion. A comparison of several numbers differing by a common ratio gives us *Arithmetical* and *Geometrical Progression.* In comparing

concrete numbers, when the unit is artificial, we perceive that they differ in regard to the value of the units, and also that we can change a number of units of one species into one of another species of the same class; and thus we have the process called *Reduction.* In comparing abstract numbers we notice certain relations and peculiarities which, investigated, give rise to the properties or principles of numbers. In comparing numbers, we may assume some number as a basis of reference and develop their relations in regard to this basis;—when this basis is *a hundred,* we have the process called *Percentage.*

Thus we obtain a complete outline of the science of numbers, and perceive more clearly the logical relations of the divisions of the science. Arithmetic is conceived as based upon the two fundamental operations, synthesis and analysis, these operations being controlled by comparison, which develops new processes from these and from itself. The whole science of Pure Arithmetic is the outgrowth of this triune basis, Synthesis, Analysis, and Comparison. The rest of Arithmetic consists of the solution of Problems, either real or theoretic, and may be included under the head of Applications of Arithmetic.

This conception of the subject is new and important. It has been heretofore held that addition and subtraction comprehended the entire science of Arithmetic; that all other processes are contained in them, and are an outgrowth from them. This is a fallacy, which, among other things, has led logicians to the absurb conclusion that there is no reasoning in Arithmetic. Assuming that there is no reasoning in the primary processes of synthesis and analysis, and that these primary processes contain the entire science, they naturally conclude that there is no reasoning in the science itself. The analysis of the subject given here dispels this error and exhibits the subject in its true light. Synthesis and Analysis are seen to be the primary mechanical processes; Comparison, the thought process, touches them with her wand of magic and they germinate and bring forth other processes having their roots in these primary ones. Comparison also becomes the foundation of processes distinct from those of synthesis and analysis, processes which cannot be conceived as growing out of synthesis and Analysis, but which have their root in the thought process of the science,—in Comparison.

It is believed that the above view of Arithmetic must tend to simplify the subject, and that much clearer notions of the

science will be attained when these philosophical relations are apprehended. A general view of the subject is presented by the following analytical outline:

Logical Outline of Arithmetic.

- I. Synthesis.
  - Addition.
  - Multiplication.
    - Composition.
    - Common Multiple.
    - Involution.
- II. Analysis.
  - Subtraction.
  - Division.
    - Factoring.
    - Common Divisor.
    - Evolution.
- III. Comparison.
  1. Ratio.
  2. Proportion.
  3. Progression.
  4. Reduction.
  5. Properties of Numbers.
  6. Percentage.

State Normal School, Millersville, Pa. EDWARD BROOKS.

A VISIT TO THE PUBLIC SCHOOLS OF CLEVELAND.

During the week from November 18th to 22d, the subscriber made a visit to the public schools of Cleveland, O. I was in eight of the largest establishments, and in about thirty class-rooms; and I was not only permitted to see and hear any exercise I might choose to call for but also to teach in, and to examine myself the attainments of, any class I wished to put to the test, a permission which I turned to the greatest possible account. There is no other way of testing the merits of a school so fully as by an examiner's own teaching and questioning, provided he is himself an experienced teacher. I propose to communicate to your readers what I saw, heard, and thought on this occasion, hoping that it may interest every true teacher.

In a class of the lowest Primary grade, containing about fifty children of six years or less, I desired to have produced the ten latest comers and most backward pupils who had not yet begun elementary reading exercises. With these ten children I succeeded within half an hour in the following task: I made them analyze the sentence, "That man has an ax", into its five constituent word-sounds, and the same sentence printed and written on the blackboard into its five word-images. Next I made them analyze the word "man" into its three sounds, and the same word printed and written on the blackboard into its elementary signs; then I made them tell of what sounds the words "am", "mam", "an", "nan" consist; and finally I had

them write these four words on the blackboard or their slates in written characters (which they most probably saw for the first time in their lives). All this was done by every one of the pupils correctly, and the writing by some in tolerable penmanship. It will be conceded that such a result could hardly have been expected, since these pupils had not before enjoyed a kindergarten education. The conclusion to which I had to come, after careful tests of every kind, was, that there was here a good teacher and a conscientious kind of preparatory work, which had well developed the intelligence, attention, and love for study of all the little learners. A few questions directed to the whole class settled my conclusion into a conviction.

In another class-room of the same grade, I found the pupils so far advanced as to read and "print" (according to the word-method) a number of monosyllables with short vowels, but unacquainted with the long vowels. I told them how to pronounce the words "mane" and "tape", written by me on the blackboard side by side with "man" and "tap." They had to find that the difference in the sound of the vowel *a* was caused by the silent *e* at the end of the words. With very little aid on my part, they learned, within the twenty minutes of my presence, how to pronounce (and some of the pupils how to write) the words "mete", "bite", "note", "cure", as distinguished from "met", "bit", "not", "cur." Now it is evident that no amount of skill on my own part could have produced a like success, but for a faithful and skilled teacher's work preceding my effort.

I made some similar experiments in three more of the lowest Primary grades of other schools, in each case with a little less success, but with sufficient success to satisfy my expectations. I could not then help coming to the conclusion, that the superintendent was taking great care to place the very first instruction in the hands of as many experienced and faithful teachers as he could obtain, perhaps of the very best—a very wise measure, I make bold to say.

In some other classes of the lowest Primary grades, I found the pupils—all new comers—backward in understanding the plainest language of the teachers, and in expressing their own thoughts. This deficiency can, of course, not be laid to the charge of the teachers, especially not where they have to do with the children of immigrants not speaking English. I undertook to show those teachers several means, suggested by my

own experience, how to make such pupils understand the spoken English, and how to make them speak it themselves. I told the pupils a fable, for instance, asked them about the meaning of every word they were not likely to understand, had these words explained by means of little sentences, and induced them to repeat to me the same fable or tale. The latter performance had, for the most part, to be facilitated by questions; but I succeeded in drawing out correct answers from many children, and now and then a pupil could tell the whole coherently. Again, I gave object lessons, one on an apple, one on a cube, when I made them perceive with their senses all that could be perceived about the object, and express it in correct languge, and compare the several features of the object to similar ones of others which they had to find. In almost all cases I obtained good answers, and I impressed on the pupils' minds the importance of answering in complete sentences—very necessary practice with all such as have not yet learned a sufficient and correct use of English.

In a class of the B grade of the primary, I found the teacher engaged in passing from multiplication to division, and I proposed to render the class wide-awake for the task by a lesson on the elementary notion of fractions. In half an hour I elicited from sixty to seventy correct answers to the following, or similar questions: "If you cut a pie into two parts, one as large as the other, what is each called? How many such halves are there in the whole pie? Are they called halves, if they are not equal? How many such halves in two, three, four, etc., pies? or apples? or pears?" Questions of the same kind were put as to thirds, fourths, fifths, and the fractions were written on blackboard or slates, and the writing was read from the slates. Again it was asked, "Which is more, one-half or one-third? One-third or one-fourth? etc. Two-halves or two-thirds? etc. Three-thirds or three-fourths? etc. Which is less, three-fourths or four-thirds? (and why so in every case?) How many thirds, fourths, etc., in one-half? etc." Here the teacher must have been uncommonly able, or I could not, with all my experience, have done so much thorough work in so short a time.

In a ten minutes' lesson in Etymology, which I gave to a class of the D (lowest) Grammar grade, I succeeded in illustrating the fact that Anglo-Saxon prefixes are joined almost exclusively to Anglo-Saxon roots, while Latin (Romanic) prefixes are

only joined to Romanic roots—an excellent means toward finding the roots, their descent, and meaning. I could illustrate this law only with the Anglo-Saxon prefix *be-* and the Romanic prefix *per-*. But even that little sufficed to make the class promptly distinguish some dozens of words having these two prefixes as to their descent, and to explain the original meaning of their roots. This could not have been done with a class of indifferent development of linguistic power, as far as can be expected at the age concerned.

Two classes of the A Primary grade, having just begun to understand what "name words" (nouns) are, were led by me to find the following two differences of nouns and verbs: that only the latter have person, inflections, and that only the former can be more closely defined by adjectives, while the verbs are modified by adverbs. Without making use of the latter two technical terms, I succeeded in half an hour in having from forty to fifty nouns and verbs, which I named promiscuously, correctly distinguished by most pupils of the two classes. This was likewise a success, presupposing a good elementary training.

I witnessed the instruction in German (which, during the last four years, has been successively introduced into about two-fifths of all the classes) in seven or eight classes, from the High School down to the Primary grades. I found little to criticise, thanks to the efficient superintendence of this department by Messrs. L. Klemm and C. L. Hotze, and to their careful selection of the German teachers employed, who, with hardly one exception, were equal to the task.

Drawing has been taught since the beginning of the present school year in all the Grammar and some of the Primary grades. The specimens of drawing that lay open to my inspection, were uniformly good even excellent for so short a time of exercise. Nearly the same may be said of the specimens of penmanship and written spelling exhibited to me in many classes.

Vocal music having been taught for three years by the class-teachers themselves under the direction of an expert, I called on quite a number of classes for a song. The method of teaching employed struck me as thorough and most efficient. The voices were uniformly sweet and pure, and the performance, in an artistic point of view, almost faultless. To test this remarkable proficiency still further, in two A Grammar classes I wrote on the blackboard the notes of somewhat difficult songs, which I was sure they had never seen or heard, without the words.

They executed them at sight with "ut, re, mi, fa, sol, la, si," without hesitation—the one, the more difficult, without the slightest blunder, the other in like manner (another class) at the second time. I challenge any school in this country to show better or equal results!

In one of the High Schools I witnessed a lesson in physics, which, I need but say, did credit to both teacher and pupils.

I found the greatest variety in the discipline of the pupils, but in all classes, without any exception, a most becoming behavior. There was nowhere a trace of that military or mechanical discipline which prevails in almost all schools of this country, much to the detriment of the pupils' ability of moral self-government. Bodily punishment and forcible means of education in general are, I was told, not forbidden, but voluntarily shunned by the teachers, and replaced by efforts to make the children act properly from moral motives—such as appealing to their sense of duty, their love for the school, its purposes, and for the teacher. *This is a reform* of the highest merit, and a most praiseworthy success, so much the more as there is no effort visible to overstimulate the ambition of the pupils, or to make show with marks of merit. I was told both by the superintendent and by teachers, that the test applied by him as to their efficiency is not principally the percentage of pupils in the acquisition of facts committed to memory, but the general average development of intelligence and mental powers exhibited by them. Who can deny that this is a very judicious test?

Likewise I could not but discover that a great deal of scope is allowed the teachers in the methods of instruction, the choice of time for each study, and the manner of discipline, so that every teacher may unfold his individuality and feel untrammeled in his peculiar ways, always provided, however, that all mere mechanism in teaching and disciplining be discarded; that a fixed proportion of time be devoted to every given branch of study, and that given models of instruction and education be imitated. It is evident that, under such judicious superintending, the teachers of Cleveland do their duty with a will, feel happier in their vocation than others, and are zealous to improve in their art and science.

It is but natural that the number of pupils in the Grammar classes, especially the higher grades, as compared with the number of pupils in the Primary grades, is in a much better proportion than in any other public schools of the Union. This is

in itself a *prima facie* evidence of the efficiency of the whole system of education adopted in Cleveland.

I will not conceal that this bright picture has, in my opinion, also its shades. The gymnastic exercises introduced for about two years are far from being rational. The power of speech is not carefully enough cultivated. The habit of most teachers and classes of speaking in a low voice, almost a whisper (which I know is an aid to discipline) begets a neglect of the cultivation of all the organs of speech, and of correct grammatical and rhetorical emphasis. Grammatical instruction, the weakest feature of all American schools, is not yet what it ought to be.

But these and some minor shortcomings are of little account compared with the merits of these schools. There is such a zeal displayed, both by the superintendents and the teachers, to improve their system of education, and so considerable has been the progress attained within not quite a *lustrum*, that all the shortcomings may be expected to disappear in another lustrum.

Those superintendents and teachers of public schools who look for a model of superintendence and educational efforts, will perhaps thank me for having published the above report. At any rate I feel it my duty to direct the attention of men and women of my profession to this progressive system of schools.

Newark, N. J., Nov. 27th, 1872. ADOLF DOUAI.

THE AESTHETICS OF THE SCHOOL-ROOM.

We can readily conceive that man's physical necessities might have been abundantly met without such an overwhelming supply to meet an aesthetic demand. But the Creator has so ordered his work that sky and sea, blade, bud and flower, all animate and inanimate things, sing forth their lessons of beauty unceasingly. Who hath ears to hear them, may hear and be made glad. Beauty and use are so co-ordinated and commingled in nature that there is neither inferior nor superior. The useful is only then most useful when added to the beautiful; and the beautiful is most beautiful when conjoined to the useful, and with it looking toward a purpose.

It seems the extreme of folly, even though life be "a warfare," "a vale of tears," or "a sea of sorrow," to ignore the ex-

istence of so much that is competent to bless and save us in its bitterness. Even a little clay wrought by the hand of the Master, is sufficient to open the blindest eyes to the infinite loveliness everywhere. Possibly every teacher may secure the anointing of and so get such a love for beauty into the deep places of the soul, that she, too, may work miracles, transforming by her plastic touch unsightly and unlovely things into things goodly and to be desired. At any rate, every school-room furnishes abundant opportunity to test the ability to do this.

All general effects are produced by the most careful attention to particulars. No woman of taste takes up her residence in a house without studying the minutia of its possibilities. The relation of wall to carpet, of both to furniture, the effects of light and shade, the distribution of ornaments, are all carefully considered. But the same woman a teacher does not always use her sense of beauty to make the most of her school-room. The school-house is a shop—a place in which to work, and from which to flee as early as possible. Thus she makes herself the servant of her work. School duty is her antagonism, and it is victor by the ruling of the clock on the wall. As soon as one so puts her soul into her surroundings as to make them the complement of herself, she makes for herself a place more to be desired than all others. So it is not difficult to see how a little skillful labor would make the school-room delightful, and install the teacher mistress of the situation.

There are in every school-room possibilities in the arrangement of furniture which may be made use of to produce pleasant effects. The table, the chairs, the stove, the maps and charts, all should be made to contribute to this end. A table spread, even a clean towel or a newspaper, will serve to cover the defects of an old table, and make it presentable. Broken and rickety furniture must go out of sight. Better a clean, whole stool, than never so elegant a chair in dilapidation. In warm weather an ill-looking stove is easily converted into a pretty flower stand by some forest boughs, or some asparagus, with bouquets and pots of flowers, which the pupils will bring if encouraged to do so. If it is winter some stove polish will make it look new and tidy. The stove of a school-room is often the sum of all villainies, aesthetically. It is made the receptacle for bits of apple, remnants of lunch, pieces of paper, and all the inevitable debris of school. The hearth serves for

spittoon, and the zinc is soiled with ashes, chips, and melting ice and snow. There is no need of such an insult to the good taste of the school.

Teachers may make a great deal of the effects of light and shade in their rooms if they study them. Pupils are made restless, and both children and teacher become irritable, by a light too intense glaring upon them. Then, to shade the sunny windows and to open those on the shady side, would be to introduce comfort and quiet. Again, on a dark or cold day to open up the lightest and sunniest side, to get all the sunshine and warmth possible into the house, is to bring in inspiration and joy. *One can not teach the best school without window curtains or blinds.* The material is not so important, as the service they render in adapting the light to the comfort of pupils and teacher. I know a teacher who, in the first school she taught, made her's of newspapers, ornamented at the lower border with devices wrought with scissors, and fastened them up with hammer and nails! Nevertheless, they were good curtains, and helped wonderfully to teach the school.

Much can be done toward making a room pleasant by a skillful seating of pupils. There are harmonies of proportion and color to be observed. A girls' school always seems brighter than a mixed school, and a mixed school brighter than a boys' school. The colors of the dress of girls give warmth to the room in winter, and the light clothing of summer gives an air of freshness and coolness. The eye requires that the pupils shall be graded from rear to front according to size. A hap-hazard arrangement in this regard is never satisfactory.

It is fortunate for the school if the teacher writes well. When the boards are kept black and in good condition, the teacher's work is well done upon them, and the pupils are constantly reminded of their duty in this direction. Nothing is more really ornamental in a school-room than a good board covered with well written work—problems, copies, abstracts of lessons, &c. Much model work of this sort should stand upon the board all the time, that unemployed children may have something to copy upon their slates.

Thus far I have said nothing of ornamentation, but every teacher can do something in this regard. Pretty hanging baskets can be made at absolutely no expense. Pots of flowers and moss can be had for the taking care of them. The world is full of pretty, cheap pictures. They may be taken from any

of the first-class illustrated papers. One who is looking for them will find an abundant supply. Some medium-sized picture frames can be procured, and then by changing the pictures from time to time, the school will always have something new at no expense. One of the most successful primary teachers I know, brings every week into her school a new object of interest. It may be a picture, or a hanging basket, or a bracket and vase,—it is something which the children enjoy, and in the bringing of which they see an effort to make them happy. She takes an early opportunity to have a conversation upon it, and then gives it to the school until she has occasion to replace it by some other object of interest. I know another who is constantly planning pretty drawings for her board. She makes a practice of having something new upon the board every Monday morning. Her pupils have learned as they come in to look for the pleasant surprises she prepares for them. Still another has several pictures which are owned a month each by classes of pupils. A card suspended beneath the picture gives the names of the for the time owners. One of them belongs to the pupils who are perfect in attendance for a month; another to the twenty who have stood highest in their lessons for a month; and a third to pupils whose deportment has been without criticism for a specified time. In this way every child has something to work for. One can not get perfect lessons, perhaps, but can come to school regularly, or can be perfect in conduct. Each child is likely to have a share in one or other of the pictures. If no one earns them they are taken down and put away. So every one is working not only for himself, but for the school. In this way the ornaments of the school are made not only silent ministers to happiness, but positive forces in the school-room.

But, after all, the soul of the teacher has greatly to do with the beauty of the school. A light glows in the face of the conscientious, gentle, sympathetic teacher, which illuminates all the room with its brightness. In the reflection of her own character she sees in the seats truthfulness, confidence, respect and love. And so the spiritual beauty sanctifies and glorifies all the beauty secured by cleanliness, by arrangement, by ornamentations,—by any and every device in material things.

Cincinnati, O. D. A. Lathrop.

A NEW FEATURE OF A TEACHERS' INSTITUTE.

MR. EDITOR: I want to suggest a new feature in conducting teachers' institutes, or, if not entirely new, one that at least possesses merit, for I have seen it tested. It is this: The executive committee of the institute invites all the schools of the county to furnish specimens of their teaching by bringing classes with them, and exhibiting whatever excellence they have. Of course all would not do it, but *some* would, and those usually possessing the greatest merit. The schools in the towns and cities in the vicinity of the institute would be most likely to respond. In this way, whatever methods or excellence any of the schools possessed, might be made the common property of all.

My attention was called to this subject while attending the Hancock County Institute, held at Findlay, O. I there witnessed some of the finest class exercises, it was ever my good fortune to see. The arrangement of the matter was due to the superior management of Supt. Wood, of Findlay, and his corps of excellent teachers. Thirty-five minutes each day was set aside for class exercises from the several grades of his schools, chiefly from the primary. These exercises consisted of object lessons, writing, reading, music, arithmetical operations, spelling and defining words, map-drawing, etc. I have witnessed these exercises as conducted in the best schools in Boston, New York, Cincinnati, Cleveland, Chicago, Columbus, and many other places, and it is due these unpretending schools of this little western town to say, that I never saw these exercises, as here conducted, excelled or even equaled.

Take map-drawing, for example. In one minute and forty-five seconds from the time the first mark was made upon the board, a map of the United States was produced by about forty pupils, presenting entire outline of lakes, rivers, important towns, capitals, state lines, etc., with an exactness and rapidity truly marvelous. In just four minutes a map of Europe was produced by each one of about the same number of pupils, that rivaled in completeness some of our best printed maps. So dexterously and thoroughly was this done, that the State Commissioner, who was present and witnessed the exercises, said that if he wished to give a lecture on physical geography, he would not ask a better map, with which to illustrate, than many of those drawn by this class.

Now, if these things can be done in Findlay, they can be done in any other place similarly situated; and I know of no better way of convincing and converting country teachers and others, than to let them *see these things done*, as well as to hear about them from the lips of a lecturer. So great was the interest felt in these matters, that the rooms were crowded to overflowing all the time; and the members of the institute, by a unanimous vote, instructed their executive committee to invite all the schools in the county to be present next year *in force*, and to compete in the various exercises of teaching.

It is easy to see how this might be made to excite the enterprize and enthusiasm of the schools of the county, even though there may be but few exhibitions. The teachers present would catch the plans, and practice them in their own schools, thus making common what is now so rare.

Our farmers and mechanics, and, in fact, nearly if not quite all material laborers are every year invited to contests like this in our county fairs. Why may not the teachers make a kind of county fair of the teachers' institute, thereby challenging the best workmen and the best specimens of work in *their* vocation?

If you deem these suggestions of sufficient merit, you may make them public. Yours, etc.,

Ohio Central Normal School. JOHN OGDEN.

DRAWING.

DRAWING is in many respects like a language,—a visible language, the language of form; having but two letters in its alphabet,—the straight line and the curve; in this respect like our own written words, made up of combinations of straight and curved lines,—with this difference, that, whilst a word suggests the name and thought, drawing suggests the thing itself. Both drawing and writing depend for attainment on the same faculty,—the faculty of imitation; though drawing, being simpler, in its elements than writing, is the more easy of acquirement. It has been amply demonstrated that every person who can be taught to write can be taught to draw; and where both are taught simultaneously, they assist each other,—success in one being a certain indication of success in both.—WALTER SMITH *in "Art Education."*

Editorial Department.

——The handsome appearance of a periodical is a compliment to the good taste of its readers, and hence the Teacher keeps within the law of modesty in congratulating its many friends on its new and attractive dress. The old one was neat, with the exception of the portion printed from the smallest type which was much worn. This has necessitated a new outfit—one becoming an educational journal which so many are pleased to call "the best." We trust that this improvement may be accepted as an additional assurance that no reasonable expense will be spared to make this journal worthy of the support of teachers and all other friends of education.

——Dr. Mayo's paper presents very felicitously a truth which every teacher of children should ponder. There is danger that the prominence now given to methods may cause teachers to look too much outside of themselves for the conditions of success. The adoption of correct methods in teaching is very important, but this does not insure success. The vital element in every method is *what the teacher puts into it*, and hence the prime fact in every school is the teacher. This is pre-eminently true in the direction of moral training. Here the teacher's character is more potent than his words. The child may bolt his heart against good counsel, but he can not shut out the teacher's spirit. This penetrates to the very source of conduct, and becomes an unconscious inspiration and strength. But we merely wish to call attention to this suggestive and excellent paper. It needs no editorial support. We only regret that its length compels us to divide it. The concluding portion will appear next month.

——The following passage in the President's Message has been read with satisfaction by nearly every intelligent and earnest friend of public education in the country:

"The rapidly increasing interest in education is a most encouraging feature in the current history of the country, and it is no doubt true that this is due in a great measure to the efforts of the Bureau of Education. That office is continually receiving evidences which abundantly prove its efficiency from the various institutions of learning and educators of all kinds throughout the country. The report of the Commissioner contains a vast amount of educational details of great interest. The bill now pending before Congress providing for the appropriation of part of the proceeds of the sales of public lands for educational purposes to aid the states in the general education of their rising generation, is a measure of great importance to our real progress, and is so unanimously approved by the leading friends of education that I commend it to the favorable attention of Congress."

We think the President gives the Bureau of Education a little too much credit, when he says that the rapidly increasing interest in educa-

tion is due "in a great measure" to its efforts. But the Bureau has unquestionably done much in this direction, and we rejoice in its great and increasing usefulness. It is becoming an educational power in the land, and this too without the least official interference with the state and local management of schools and school systems. It is honoring the arguments of those who advocated its organization, and its now limited facilities should be largely increased. We also rejoice that the time has come when the President and the Secretary of the Interior can commend the opinions of *educators* to the consideration of Congress, and we hope that these opinions may give increased weight to the wise recommendations of the Executive. We trust that no future President will be obliged to call the attention of Congress to the fact, that the usefulness of the military academy at West Point is impaired "by reason of the large amount of time unnecessarily expended in giving new cadets a thorough knowledge of the more elementary branches of learning, which they should acquire before entering the academy." It is high time that the present method of appointing cadets was abandoned.

—— A CORRESPONDENT of the *Massachusetts Teacher* (E. H. Morton) gives the results of an experiment to establish a postoffice in his school. He purchased a lozenge box, and, cutting a hole in it large enough to admit a letter, nailed it up in his school-room. He then made out a series of regulations, and appointed a postmaster, and a school secretary. The mail was distributed each morning. The regulations stipulated that each letter written should contain a question pertaining to some subject presented in the text-books used in school, and that the scholar receiving it should answer the question within a week and state the number of mistakes found in the letter received. Letters could contain no matter not pertaining to the school, and the teacher reserved the right of inspecting the letters at any time before their distribution, and each morning the postmaster collected the letters distributed the previous day, and passed them to the teacher for correction. The school secretary kept a record of the number of letters distributed each day, the number free from errors, with the names of the writers. The experiment resulted in "a great interest on the part of parents and pupils, a full mail every morning, a neatly kept journal, and a decided improvement in the language, spelling, punctuation, and writing of the children." They also acquired a a vast amount of general knowledge. Mr. Morton advises teachers, who are not afraid of work and who do not distrust their ability to answer the questions which may be referred to them, to try the plan and mark its results. In a large school the mail may be distributed once a week.

—— HENRY WARD BEECHER is an earnest advocate of compulsory education. In a recent lecture in Springfield, Mass., he urged that while the "original Yankee" and many foreigners do not need to be driven to school, compulsion is needed to secure the education of the children of a large class of our foreign population. He held that the state should

insist on the education of every child, but the parent should be left free to send his children to a public school or to a private school, as he may prefer. But we judge from an abstract of the lecture that Mr. Beecher failed to tell his audience how the execution of compulsory laws is to be secured. It is, of course, easy to frame and pass a law requiring all children to be sent to school, but the execution of such a law in this country is the practical difficulty. It is possible that this difficulty may be overcome, and we are glad that the matter is to be practically tested. Michigan, Connecticut, and New Hampshire have each enacted a carefully guarded compulsory law. We shall soon be able, provided we can obtain reliable statistics, to compare the school attendance in these states with the attendance in other states, and thus determine the actual advantage of compulsion. If these laws prevent truancy and absenteeism, if they bring the children, now growing up in ignorance, into the schools, the question of compulsory school attendance will be settled. If they fail to do what is promised, some other remedy must be devised.

—— In many of the best graded schools of the country the study of a text-book in English grammar is now begun full two years later than formerly. This is true in nearly all the graded schools of Ohio. The subject is first taught orally in connection with language lessons, and when the pupils open their text-book, they find that they are already familiar with much of its contents. This is an important reform, and when our youth all reach grammatical facts and principles through language, we shall hear less complaint about the text-books. We are also glad to see that the new courses of study nearly all provide for more or less systematic instruction and practice in the use of language. "Language Lessons" have a prominent place from the primary to the grammar grade. This is the true idea, but we fear that, in some instances, the schools have old instruction under a new name. When simple exercises in the writing of sentences glide into the teaching of grammatical terms and formal parsing, we simply substitute the living teacher for the text-book and reach the old result by a new method. When language lessons fail to give the pupil the ability to write a few consecutive sentences correctly, they fail to do their proper work. A drill for four years, from six till ten, ought to give the pupil sufficient practice to enable him to write a simple letter creditably, and certainly no child should be put into oral grammar until he knows when he has written a sentence and can write a paragraph. The exercises in sentence writing in the primary schools ought, as it seems to us, to be succeeded by at least two years of daily drill in the writing of paragraphs, letters, etc. The ideas and thoughts to be expressed should, of course, be developed or suggested by the teacher, but their proper expression on paper should be attained by the pupil. Nothing but daily practice in composition can impart to a child the ability to write the English language. Let the children have more composition and less technical grammar, whether taught orally or otherwise.

—— *The Advance* of a recent date contains an interesting article by Hon. B. G. Northrop on the new educational movement of China. He states that the plan of sending Chinese youth to this country to receive a thorough American education, originated with Mr. Yung Wing, who years ago came to this country from a mission school in China, and after obtaining a preparatory education in Monson Academy, Mass., entered Yale College, where he graduated in 1854, with high rank as a scholar. In 1864 he was sent to this country to procure the most improved modern inventions, especially for the manufacture of fire arms. The result of his mission was the building of arsenals in China for the manufacture of the best breach-loading rifles, "repeaters," and ordnance, and the introduction of other American manufactures. The thirty boys now in this country are placed in cultivated families, two in each family, and are under the supervision of four Chinese commissioners, who, with their attendants, reside in the family of Mr. Chin Laisun, a Chinaman, at Springfield, Mass. Before coming to this country, the boys were taught for five months by Mr. Laisun, who is a graduate of Hamilton College, N. Y. Their average age is about twelve years, and they are "all bright and studious and, so far, contented and happy." In response to Mr. Northrop's circular, one hundred and sixty-six families offered to receive them. Ninety other boys will in due time follow those now here, and Mr. Northrop thinks they may soon come by hundreds. The plan is a wise one and, if successfully managed, will result in a great reform movement in China. The oldest and largest nation of the globe thus comes to the youngest for light and knowledge! Truly the last is first.

THE CHICAGO EXPERIMENT.

At the meeting of the American Institute of Instruction last August, Supt. Pickard stated that there had been very few cases (we forget the number) of corporal punishment in the Chicago schools since the fire. It was anticipated that the want of accommodations and the consequent large increase in the number of pupils in each room, would make the discipline of the schools more difficult, but mild measures had sufficed to maintain a high standard of order. There were but 201 temporary suspensions during the year. He attributed this result to the influence of the great calamity "in softening the natures of parents, pupils, and teachers." He promised the audience that the teachers of Chicago would give the world an example of a city in which corporal punishment is allowed but not practiced. We learn from *The Chicago Teacher*, the first number of which is just received, that this experiment is now in progress. At the beginning of the present school year, Mr. Pickard requested his teachers to abstain entirely from the use of the rod. He advised them to avoid collisions, to remove temptations to misbehavior, not to detain pupils after school, and not to sacrifice sixty-two good children for the benefit of one bad one. "When children need reformation, they should be sent elsewhere." At the session of the Principals' Asso-

ciation, held Oct. 12, each principal gave his experience in managing his school without resorting to corporal punishment. According to the *Teacher's* report, Mrs. Farnham "could do without the rod, but saw cases in which its use would be beneficial." Mr. Kirk said that "though his school did not grow worse in discipline, it was harder to govern it. One pupil in 75 needs disciplining." Mr. Williams "had punished eight children for *truancy*. He was doing well without whipping, but he saw the good effect of what whipping he had done." Mr. Belfield was "not so well satisfied with the attempt." Mr. Baker held "that suspending children made them no better; he preferred keeping them in school and compelling them to behave." Mr. Cutter thought "it would be easy to govern without flogging were it not for the political and religious influence used to restore suspended children." Mr. Mahoney believed "that the only substitute for whipping needed is to throw the responsibility of children's conduct upon their parents." Mr. Merriman declared that "the parents need most of the principal's attention, and that when they are educated in common sense the management of their children is an easy matter." Messrs. Stowell, Bright, Lewis, and Brownell, Mrs. Brown and Misses Babcock and Flowers reported the non-use of the rod satisfactory success, and all the principals, as we judge, were disposed to continue the experiment.

There are several cities and towns in the country in which the use of corporal punishment has been positively forbidden by the rules of the board of education, but in most cases the result has not been satisfactory. The very fact that any resort to the rod was forbidden, has increased the difficulty of governing by milder measures. There has usually been either a falling off in the discipline in a part of the schools, or a more frequent resort to suspension. Here and there the teachers in one building have maintained the highest standard of discipline without resorting to whipping, and this result has been most frequently attained when teachers have *voluntarily* made the experiment.

We believe that Chicago is the only city, certainly the only large one, in which an entire corps of teachers has voluntarily discontinued the use of corporal punishment, and the teachers of the country will look with interest for the result. If, at the close of the year, Supt. Pickard can report that the order in *all* the schools has been as good as it was when teachers used the rod in exceptional cases, and also that there has been no increase in the number of suspensions or other questionable modes of punishment, he will make the hearts of thousands of teachers glad. This will not, however, prove that *all* teachers can govern without any resort to corporal punishment, or that it is wise for them to do so. The experiment at Chicago is tried under the most favorable circumstances. Every teacher has the right to whip if necessary, and this the pupils doubtless well understand. In some cases this may be actually threatened, and the fear of the punishment may be sufficient. The crowded condition of the school-rooms will doubtless make suspension, actual or threatened, more effective than it would be under other circumstances.

The success of the Chicago experiment will, however, show that, not only in Chicago but in other cities, good discipline may be sustained in

the school without the aid of an ever-present rod; that more than nine-tenths of the supposed "extreme cases" may be better met by other means. We have long believed that a *reliance* on the rod in governing a school is a serious mistake. It lessens the teacher's personal influence, limits his resources, reduces his tact, and cripples his efforts. With a remedy ever at hand, he fails to use his wits and good sense to discover other means which would be more effective and better. Success to the Chicago experiment.

THE AMERICAN SCHOOL SYSTEM AT VIENNA.

In response to the earnest solicitations of the Austrian authorities, a movement has been begun in this country to secure a worthy presentation of our system of education in the coming World's Exposition, to be held at Vienna. Baron Schwarz-Senborn, the Director General of the Exposition, is so very desirous that the American school system be fully represented, that he has set aside the rules limiting the time of American entries in this department. A large space has been devoted to the United States, 360 feet by 50 feet, and he specially urges that a model school building, showing the improvements in ventilation, seating, etc., be erected. Gen. Van Buren, the United States Commissioner at the Exposition, and Commissioner Eaton are doing their utmost to awaken a public interest in the subject and secure necessary action.

A conference of state and city superintendents was held in Washington, Nov. 13th, and, in pursuance of the plan adopted, Commissioner Eaton has undertaken the supervision of the enterprise. He has already requested the school authorities of the several states and also of cities and towns to furnish—

First—Charts showing number of schools, grades, studies in each, pupils and teachers, average attendance by sex, salary and sex of teachers, school accommodations and income *per capita*, cost of tuition, total cost, expenditures, school taxation, how much local, etc.

Second—Specimens selected so as to illustrate fairly each class and grade of drawing, writing and composition; also series of questions applied to studies in the several grades, such as are used in written examination. This part of the exposition to be accompanied by charts, diagrams, models, maps, and all other articles used objectively in teaching, with a statement of the peculiarities, *pro* and *con*, of system employed.

Third—To secure from leading cities a model of best school building, equipped for use; also profiles, elevations, ground plans, etc., of other buildings, accompanied by statistics as to size, cost, material, method of construction, if special; modes of ventilation, heating, &c., with gymnastic and school furniture, illustrating workings.

He has also prepared a more general circular, giving necessary information somewhat in detail, and inviting the co-operation of all educational institutions and associations. He requests that all articles be furnished in duplicate with a view of founding a National Education Museum and Library at Washington.

At a public meeting held in New York, Nov. 22nd, addresses were made by Judge Van Vorst, who has been appointed to the charge of

Group No. 26 (Education) in the Exposition, Commissioner Van Buren, President Webb, of the New York College, and others. Commissioner Van Buren requested that the city of New York should send a model schoolhouse, large enough to illustrate the practical working of a graded school. This suggestion met with general favor, and it was estimated that a building large enough for the purpose can be erected at an expense not exceeding $30,000. A committee of five was appointed to see that nothing "incomprehensible" is sent, and President Hunter, of the New York Normal College, and Lawrence D. Kernan were appointed to attend the exposition and explain the New York system. Some fifty prominent representatives of the educational interests of the different States were appointed a sub-committee to co-operate with the United States Commissioners. This action of New York will doubtless incite other cities to a like liberal course.

A meeting of the city superintendents and college presidents of Ohio was held at the office of the State Commissioner of Common Schools, Dec. 4th. Among the subjects specially considered was the representation of the school system of Ohio at Vienna. Commissioner Harvey explained the plan of action adopted at the Washington conference, and urged the importance of the movement. Those present promised earnest co-operation. Cincinnati, Columbus, Dayton, and several other cities will furnish models and photographs of school buildings, methods of examining, promoting, and grading pupils, courses of study, results attained, etc. Several colleges will present facts showing their resources, facilities, and character. The benevolent and reformatory institutions of the state will also be represented.

The above facts indicate that the school system of the United States will be well represented at the Vienna exposition, and we are sure that the country has no other interest which will attract greater attention or which will better stand the test of examination and comparison. Notwithstanding their evident defects, we believe that the school systems of several of our states are the best in the world. In their organization, school buildings and appurtenances, and text-books they are certainly without an equal. In the Universal German Teachers' Association, which met at Hamburg in May last, Dr. Lange, one of the most eminent German teachers, advocated the adoption by the Empire of Germany of an elementary school system similar to that in most of the states of the American Republic. He questioned ex-Supt. Kissell, of Iowa, who was present, most minutely respecting the American school system and openly expressed his admiration of its characterestic features and the results attained by it. Whatever we may think of these systems, the educationists of Europe are studying them with interest and general approval. Nor are we so far behind Europe in our methods of teaching as many travelers represent. We take it that the German teachers in this country, who were educated and trained in Germany, fairly represent German methods and skill. So we need not go abroad to learn what these methods are and intelligently compare them with our own.

It has been suggested that a model American school, in active operation, be exhibited at Vienna. We trust that no attempt of this kind

will be made, as the suggestion is manifestly impracticable. The mechanism of a method of teaching may be thus exhibited, but that which gives the method its highest value, can not be. We trust that special pains will be taken to give an idea of the best *rural* schools in this country.

It is expected that Congress will make an appropriation large enough to enable the Commissioners to carry out the excellent plans they have devised. The several states and the larger cities should make provision for the employment of competent agents to represent their school systems. Let us make this feature of the American department of the Vienna Exposition a complete success. It will not only be of the highest advantage to the United States, but it will give a new impetus to popular education in Europe.

EDUCATIONAL INTELLIGENCE.

——Mr. Mori, the Japanese Minister, has received the details of the new educational system in Japan, which embraces the organization of eight colleges, two hundred and fifty-six high schools, and over fifty thousand public schools, at which the attendance is to be compulsory for all children above six years of age.

——The Michigan State Teachers' Association met in Jackson, Dec. 26th and 27th, and the Illinois State Teachers' Association, in Springfield, and the Missouri State Teachers' Association in Kirksville, each Dec. 25th, 26th, and 27th. The Indiana State Association will meet in Logansport, Dec. 31st and Jan. 1st, 2d, and 3d, and the Rhode Island Institute of Instruction in Providence, Jan. 9th and 10th.

——Prof. Winchell, of Michigan University, has accepted the presidency of a New York university.——Geo. P. Beard, late principal of the State Normal School, Warrensburg, Mo., takes charge of the new Cumberland Valley State Normal School, at Shippensburg, Pa., to be opened April 15th, 1873.——Prof. Rush Emery, late of Lima, N. Y., and recently appointed to a chair in the Indiana State Normal School, died soon after entering upon his duties. Cyrus W. Hodgin, a graduate of the Illinois Normal University, is his successor.——Prof. Hadley, of Yale College, died Nov. 14th, 1872. He was one of the best Greek scholars in the country, and by his death Yale loses one of her most distinguished professors.

——The *Indiana School Journal* boasts of a *bona fide* circulation of 3,000, a gain of 1,000 since 1871. It adds, "We know of but one School Journal in the United States, not published as the advertising medium of some private enterprise, whose circulation exceeds this." We suspect that the "one" school journal referred to is the Ohio Educational Monthly, whose average circulation, for several years past, has considerably exceeded 3,000. But the circulation of the *Penna. School Journal* is also

much above this, and we see that the *Kansas Educational Journal* rejoices in its new success in reaching 4,000. We hope that not only Bro. Bell's excellent journal but a dozen others may have the coveted 4,000 subscribers before next December.

—— Hon. C. E. Stuart, of Kalamazoo, Mich., has disputed the right of the board of education to levy a tax under the common school law to sustain a high school. The Attorney General of the State, Hon. Dwight May, answers that in his opinion taxes may be voted to teach the higher branches, but the question will doubtless come before the Supreme Court. We regret to see that *The Chronicle*, the organ of the University, believes that the high-school system has exerted a hurtful influence upon the common or district schools. With as much reason, it may be asserted that the academies of New England have retarded the progress of the common schools. The high schools and academies of the country help the common schools.

—— The State Normal School of Rhode Island, which was opened in Sept. 1871, has already taken rank with the best normal schools in the country. It has a superior class of students, and the instruction and training are efficient and thorough.——The Maine Eastern Normal School, at Castine, opened the winter term in its new building, which in size, appearance, and arrangement is worthy of the school and a credit to the town and state.——The State Normal School of New Hampshire, located at Plymouth, graduated twenty-eight teachers Nov. 20th. The class was a fine one. The new building will soon be ready, when the number of students will be greatly increased. New Hampshire formerly kept Ohio company on the normal question, but she has gone with other states. Good by, one and all! Ohio will come up in the good time coming.—— Forty-eight colored girls from North Carolina have entered the Hampton Normal School, Va., where they will be fitted for teachers gratuitously.

—— Harvard University lost heavily by the Boston fire of Nov. 9th, 1872. Its property in the burnt district, including the land, was valued by the city assessors at $562,000. The buildings destroyed were insured for $216,000, only $100,000 of which will be paid, and it is estimated that it will cost $300,000 to rebuild. This makes the actual loss $200,000. The annual rents of the buildings were $38,000, and the extraordinary expenses resulting from the fire, are estimated at $12,000. The president and fellows have appealed to the friends of the University to make these losses good, and a considerable portion of the amount required has already been subscribed. The annual income from this property was used to pay salaries and meet other current expenses of the institution.

—— Secretary Northrop, of Connecticut, has appealed to college presidents and state school superintendents to memorialize Congress to pay back the Japanese indemnity fund and the Chinese indemnity fund, on condition that these governments use the same for the purposes of education. He suggests that the former fund be used to promote female education in Japan, and the latter to endow an American College in China.

We learn from his appeal that the Japanese fund, March 12, 1872, was $780,354.90, and that the Chinese fund, Jan. 17, 1870, was $421,000. According to Secretary Robeson's official statement, March 20, 1872, the total amount of the damage for which this large sum was extorted from Japan, was only $19,929. A bill to release Japan from the payment of the balance due ($375,000) was *unanimously* passed by the House at the last session, and is now in the Senate. The return of these funds to be used for the purpose proposed, would be a wise and noble act of our government.

CHICAGO.—The eighteenth annual report of the Board of Education is a well filled document of 256 pages. It contains the reports of the president of the board, the superintendent, and various committees, with an appendix of statistics, rules, etc. The reports of the president and superintendent both open with an eloquent reference to the great fire, which destroyed the office of the board with all its documents, save the records of the board's proceedings, and fourteen buildings, furnishing accommodations for about 10,000 pupils, in charge of 135 teachers. Fortunately the school funds and the special funds were safely deposited, and, in an incredibly short time, the schools were reorganized and again in operation. At the close of the year Supt. Pickard reports: "I am fully persuaded that our schools are to-day in better condition than they were before the fire"—a result due to the almost herculean efforts of the board, superintendent, and teachers. Supt. Pickard makes a full report of the donations for the relief of teachers and pupils. The amount of money received was $22,678.18, of which $1,620.17 has not yet been disbursed. This large fund was chiefly contributed by teachers and their pupils in various cities and towns. We select the following generous contributions: Manchester, Ia. (Teachers), $50; Terre Haute (T.), $172; Kansas City (T.), $75; Washington, D. C., $1,272; Cleveland (T.), $927.75; Wheeling Seminary, $75; Fall River (Mass.), $256.78; St. Louis (T.), $804; Brooklyn, $3,646.36; San Francisco, $3,158.48; Dayton (T.), $85.25; New Orleans (T.), $265; New York City, $10,899.42; and Cayuga Co., N. Y. (T.), $100. The topic most fully discussed by Supt. Pickard is "The Province of the Free School." He most convincingly answers the sectarian demand that public schools be restricted to elementary instruction because of their alleged irreligious tendency! Our readers shall hereafter have the benefit of at least the gist of this able discussion. We glean from the report the following statistics: Population of city (Oct. 1872), 367,396; school population, 88,219; number of pupils enrolled, 38,035 (district schools, 37,371; high school, 597; normal school, 67); average daily attendance, 22,996.4; number of teachers, 476 (male, 31); number of school buildings, 45; number of school-rooms, 412; number of seats, 28,581.

OHIO.—A conference of superintendents and college presidents was held at the office of the State Commissioner of Common Schools, Dec. 4th. After a free interchange of views, it was agreed to urge the passage of the Codified School Bill, now pending in the Senate, so amended as to pro-

vide for the reorganization of the system in townships, as was done in the original House bill; but we learn that at a second conference, held the next day, the policy of urging this amendment was reconsidered. It was urged by those fully competent to decide what is needed, that the sixteenth chapter of the bill contains the provision required. Other school measures were discussed. The college presidents agreed to admit high-school students who are deficient in Greek, provided they have mastered a full equivalent of other studies pursued in the first two years of the college course. This is now done in several of the best colleges in the state, extra instruction in Greek being provided until the students have overtaken the regular classes. The action respecting the Vienna Exposition is given elsewhere.

——SEVERAL of the gentlemen who were present at the School Commissioner's conference, spent a few hours in the Columbus schools. So far as we have learned, they were all much pleased. Several of those who made speeches in the high school, were so enthusiastic that they complimented the teachers in the presence of the pupils. Mr. Cook has made a promising beginning. He has an excellent corps of assistants.

THE TOLEDO UNIVERSITY OF ARTS AND TRADES.—Jessup W. Scott, of Toledo, has bequeathed one hundred and sixty acres of land, valued at $80,000, to found an institution "for the promotion of knowledge in the Arts and Trades and the related Sciences, by means of lectures and oral instruction; of models and representative works of art; of cabinets of minerals; of museums instructive of the mechanic arts; and of whatsoever else may serve to furnish artists and artisans with the best facilities for a high culture in their respective occupations, in addition to what are furnished in the public schools in the city." The advantages of the institution are to be free of cost to all pupils who have not the means to pay for them, and they are to be open alike to both sexes. The board of trustees consists of eight citizens of Toledo, with the Superintendent of Public Schools of Toledo, the Mayor of Toledo, and the Governor of Ohio as *ex-officio* members. The board met Oct. 23, 1872, and organized by the choice of Hon. Richard Mott as president, and Col. D. F. DeWolf as secretary. The lands devised are located about three miles from the postoffice. They are to be laid out according to a plat prescribed by Mr. Scott, and the portion not used for university purposes is to be divided into lots and leased for five years, renewable at the option of the lessee on the basis of the appraised value at the end of each five years. It is hoped that other citizens of Toledo may increase the endowment, and that the institution may be made worthy of the city and the cause it is designed to promote.

MARIETTA COLLEGE.—The college classes number more than in any former year, with a single exception, and the academy or preparatory department has a large attendance, including one Japanese student. All the instruction in the college is given by regular professors, no tutors being employed, and it is the intention of the trustees that the instruction both in the college and in the academy shall be equal to that given in any institutions in the land. The college is kept to strict college work—

to give undergraduates the best possible general education. This has characterized the institution from the first and the good results are manifest. Had the trustees been ambitious to have several departments, the energies of the faculty would have been scattered for the sake of giving each student an opportunity to study what his own fancy or caprice dictated, instead of being concentrated on the regular college course, and Marietta would have had a very different reputation from the one it now enjoys. Improvements in the material accommodations are going forward. The Society libraries have been moved into their beautiful rooms. The large room on the first floor of the new building is used for chapel purposes, and the former chapel has been converted into two spacious recitation rooms. Mr. Wm. Holden is engaged in arranging and cataloguing the college library. The whole number of volumes in all the libraries is 24,000. Mr. C. A. Bentley instructs in vocal music; all the students may attend without charge.

OBERLIN COLLEGE.—This institution has steadily grown from a small and humble beginning to one of the most prosperous and influential colleges in the country. The whole number of different students enrolled the present year is 1,171, as follows: Theological, 43; Collegiate, 142 (seniors, 25; juniors, 33; sophomores, 43; and freshmen, 41); Scientific, 45; Ladies' Department, 159; Preparatory, 634; Conservatory of Music, 240. There is only one lady in the senior class, three in the junior, three in the sophomore, and five in the freshman—twelve in all. Of the 634 students in the Preparatory Department, 193 (three ladies) are pursuing the classical course, and 441 the English course. This department is under the immediate management of Rev. R. T. Cross. the principal. Much attention is given to the preparation of students for teaching, and "Oberlin teachers" have long had a high reputation. The college terms are so arranged as to give a vacation during the winter months. This enables many of the students to engage in teaching. A "Winter School" is taught in the college building during this vacation. The school this term is managed by two of the professors, and is unusually full, some three hundred being in attendance.

CORRESPONDENCE AND QUERIES.

MR. EDITOR: It is very desirable to have a good method of writing decimals, always beginning at the left. The only author, I believe, who gives this kind of a rule is Mr. Henkle. (See *White's Complete Arithmetic.*) But I have a rule that I prefer. The decimal orders—.123456789—must first be *well* learned.

RULE.—*From the number of orders in the decimal, take* MENTALLY *the number of orders in the whole number of the decimal, and place as many decimal ciphers before the whole number as there are units in the difference. When the decimal has not as many orders as the whole number of the decimal, cut off as many places from the whole number as there are required decimal places.*

EXAMPLES.—Write 50009 billionths. Since there are 9 places in bill-

ionths and five places in the whole number 50009, there will be four decimal ciphers to be put before 50009. We write the decimal point, four ciphers and 50009. The answer is .000050009.

2. Write 403 tenths. In tenths is one decimal order. Cutting one order from 403 leaves 40.3, the answer.

Yours, etc., B. D. MITCHELL.

MR. EDITOR: In a recent number of your educational journal, which incidentally came into my hand, I notice an article on the logical analysis of arithmetical problems in primary schools. I believe that the practice you condemn is highly detrimental to very young minds. There is another evil which I take the liberty of asking you to point out. It is the practice in at least one of the public schools of this city to require every child in the class to name each punctuation mark as it is reached, thus: "comma—comma—comma—period—comma—period—semicolon —comma—comma—period"—etc. That this useless repetition of mere punctuation marks is a difficult process for the young mind, a hindrance as well as a trial, any impartial observer can see. Please give a word of advice which, perchance, may be heeded, and thus relieve future classes.

Rochester, N. Y. A PARENT.

[The method to which our correspondent refers, may properly be used a *few* times to fix the names of the punctuation marks in the memory, but when made a *practice* it is an evil and a serious one. Many of the humdrum repetitions of primary schools are productive only of stupidity.—EDITOR.]

MR. EDITOR: Will you or some of your contributors answer the following questions:

1. Which is preferable, "increase in a ten-fold ratio," or "increase in a ten-fold proportion?"

2. Are all of the following expressions numbers: 9½, eleven cows, a bucketful, a jugful, five quarts and a half, a great deal, very much, 27.53, a good reason?

3. Is the square root of two a quantity?

4. A person *gave* me a book, which I sold for one dollar. What per cent did I make?

5. Is there properly a *remainder* in division?

6. If from the rear car of a railway train going at the rate of sixty miles per hour, a cannon ball be fired back with a velocity of sixty miles per hour, how far back will it go?

8. Can a correct answer be given to any question similar to the following: "If 6 were 8, what would 11 be?

Some of the above questions have created quite a discussion in this vicinity. J. Q. A.

Natick, R. I.

DEAR SIR: I notice that many persons in pronouncing words which terminate with *r*, treat that letter as though it was silent. Is there authority for it, or is it only affectation?

Guyot says that there are constant currents of wind flowing from the

Poles to the Equator, the rotating of the earth causing them to shape into E. and N. E. Trade Winds. This is plain enough, but when he says there are West Trades in the middle latitudes so strong that they carry vessels to Europe in two-thirds the time it takes the vessels to return by the E. Trades, I am unable to understand him. How can the Polar winds cross the path of the West Trades without one of the currents being destroyed? R. P.

MR. EDITOR: What is the pronunciation of Cowper, the name of the poet? Since I read Mr. Henkle's note in your journal (in 1867, I believe,) I have pronounced it *Coo-per*. Is this correct? J. M. M.

[Russell and Alford, cited by Mr. Henkle, pronounce the name *coo-per*. Alford states that the poet not only made his name rhyme to *trooper*, but that he "begged his friends to call him *Coo-per*." Webster gives "cowper or coo-per."—ED.]

BOOK NOTICES.

A GRAMMAR OF THE GREEK LANGUAGE. By DR. GEORGE CURTIUS, Professor in the University of Leipzig. Translated under the revision of the Author. Edited by William Smith, LL. D., London. For the use of Colleges and High Schools. New York: Harper & Brothers.

Greek grammar would hardly come under the head of light literature, or of recreation from study. Yet have we found the grammar named above so interesting as actually to read it through with pleasure. Like a well told story, the interest rises to the end. Curtius's Grammar is not a novel, neither is it absolutely novel among grammars. Yet it is refreshing and edifying to note that, amid the wondrous discoveries in science, and the improvements in the text-books upon history, geography and mathematics, none of these show more progress than the grammars of the language of Homer and Herodotus, of Aristotle, Xenophon and Plato; and certainly none of these are better adapted as instruments to train and educate the hope of our country.

It is refreshing to trace the progress, even in a generation, of Greek grammars. From the mere "accidences," which, with rhyme but without reason, taught our fathers the forms of words, to the philosophic works of Bopf and Grimm, of Buttman and Kuhner, made accessible to us in the grammars of Sophocles, Crosby, Arnold, and Hadley. It is not the Greek simply but language, human thought finding its utterance in the forms of a speech at once the most copious, the most polished, and the most philosophical. The value of the Greek, as a branch of school instruction, does not lie chiefly in telling us what Homer sang or Herodotus said, but in its adaptation as an instrument to the higher ends of education—the culture and discipline of the mind. And here Grammar is invaluable. It shows us how language grows as the mind develops. It introduces us to the mind thinking. It teaches us to think. It sheds light upon our own language.

The excellencies of Curtius's Greek grammar lie in its clear exposition of the way in which the language has been developed. It reduces the

declensions to two, according as the stem ends with a vowel or a consonant, and thus reduces what is abitrary to the minimum. It classes the verb also under two principal conjugations—in *o* and in *mi*, and shows *why* by the laws of vocalization, the varying forms are produced. The table of irregular verbs is very complete. The syntax is natural and therefore logical and satisfactory, giving principles rather than rules. In the hands of a scholarly and enthusiastic teacher, this grammar can hardly fail, whether the end be to train the mind and teach philology through the medium of the Greek, or to introduce the pupil fully furnished into the treasure houses of the language of Demosthenes, Xenophon, and Homer. W. E. M.

THE DRAWING BOOK of Standard Reproductions and Original Designs for Public Schools, Drawing Classes, and Schools of Art in America. Edited and Designed by WALTER SMITH, State Director of Art Education, Mass. Boston: James R. Osgood & Co.

This Drawing Book is published in four parts, each containing some fifty plates and being about fourteen inches by eighteen inches in size. It is elegantly printed on heavy plate paper, and each part is bound in a thick paper cover. The series contains above six hundred examples, "carefully selected with reference to the needs of students who require practice in many subjects." They represent ornamental outlines, foliage and flowers, Greek and Roman vases and pottery forms, model drawings, geometric arrangements, animal forms, and the human figure. The reproductions are from such standard works as Dyce's Drawing Book, Albertolli's Outlines, Hume's Foilage, Wallis's Drawing Book, and Morghen's Human Figures—examples which have been tested in European schools of art and found valuable. The size of the page (some 14 by 18 inches) permits the copies to be made sufficiently large to furnish an excellent drill in free-hand drawing. Very few of the copies in Parts I and II, which the publishers have sent us, are in perspective and few are shaded. The shading is a simple "half-tint." So far as we are competent to judge, these books are admirably adapted to art schools and drawing classes. They seem to us too large and too expensive ($5.00 a part) for general use in public schools. Their publication is evidence of a greatly increased appreciation of drawing, not merely as an accomplishment, but as a valuable and important element of practical education.

THE ETYMOLOGICAL READER. By EPES SARGENT and AMASA MAY. Philadelphia: E. H. Butler & Co.

This "first systematic attempt to associate the study of etymology with exercises in reading" is a "new departure" which meets our hearty approval. Both reason and experience indicate that the best time to teach the derivation and meaning of words is in connection with their use, and hence the reading exercise affords an excellent opportunity for such instruction—an opportunity that has been improved by very many teachers. But we believe that the "Etymological Reader" is, as the authors claim, the first attempt to remedy this method in a text-book. It contains an etymological introduction of over forty pages, which presents very concisely the origin of English words, with copious

alphabetical lists of prefixes and suffixes, and Saxon, Latin, and Greek roots, with their English derivatives. Each selection for reading is followed by "Select Etymologies" which include the more important words occurring in the reading lesson. Many of these etymological exercises are very full. The work closes with thirty-four pages of artificial sentences for etymological practice, and a full alphabetical index of the words included in the etymological lessons. The above statements show that etymology is made an important feature of the work. The selections have great literary merit and, what is equally important in a school reader, they are well adapted to the purposes of a reading drill. The errors noticed will doubtless be corrected in the next edition. The mechanical execution of the book is excellent—a credit to American skill and enterprise.

KRUSI'S INVENTIVE DRAWING. In Four Distinct Grades of Drawing Books of Four Numbers Each, adapted to the Requirements of all Schools. By HERMAN KRUSI, Professor of Drawing in Oswego Normal School. New York: D. Appleton & Co.

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Clark's Beginners' English Grammar. New York & Chicago: A. S. Barnes & Co. Price, 60 cts.

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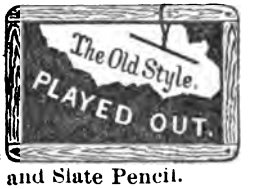

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THE

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THE CHILDLIKE SPIRIT IN THE TEACHER.

BY REV. A. D. MAYO.

(*Concluded.*)

The greatest difference between teachers is in the quality of their personality and the influence they exert on children; and this quality is, at the bottom, chiefly the presence or absence of the childlike spirit of which I speak. There is one class of teachers whose power is in their knowledge of the coarser and feebler side of child nature, their shrewdness in reading superficial motives, and their despotic force of will. They are able to discipline a school into an army corps that will carry any point in mechanical culture. They can secure "marks", preserve "order"; in short, do all that can be done by operating on the lower elements of child nature. But they dwarf and degrade our children in proportion as they succeed, and leave them unconscious of all the grander methods and exalting results of a true culture.

The other class begin by unsealing the finer nature of the child. They unconsciously win his heart, and, one after another, the depths and heights of childhood open wide at their inspiriting call. They sow seed that germinates through gathering years; they impart tendencies that go off toward infinity. Their scholars may not shine with so sharp and steel-like a brilliancy on examination day; but their little feet are set in the ways that lead to truth, and beauty, and love. It is not a

difficult or a very notable undertaking to compel a man or a nation to do some particular thing which appeals to the secondary and materialistic ambitions of the human heart. It is the most glorious and most arduous of human tasks to show one child that he has an immortal soul, and life is his school for shaping that soul into an image of perfect manhood. And such a triumph can only be achieved by the teacher whose acquirements, methods, and powers are all bathed and hallowed by the childlike spirit that suffereth, endureth, believeth all things, and worketh by love.

In this spirit was the chief difference between that greatest of English schoolmasters, Arnold, of Rugby, and the pedantic classicists that preceded and the materialistic scientists that followed him in British education. He was not a greater scholar or logician than Dr. Parr or John Stuart Mill; but he was what they and all their disciples never could be—a great English boy enveloped in a noble Englishman. He felt the typical Englishman in his bones; felt, by instict, that every true son of "St. George and the Dragon" is a huge, overgrown, credulous, willful, honor-loving boy, shut up to rear and plunge inside a solid, reserved, executive man. He acted accordingly—drew hundreds of young English boys right up to the boy in himself; but when they were face to face with Arnold the boy, they awoks to find on their shoulders the firm grip of Arnold the man. They worshiped him as boys always do worship such a man; and the noblest men in England to-day are still living out of his magnificent manhood. You can never make very great or very good men by beginning with the dry bones of logic and building up till the edifice is crowned by a faint gleam of moral aspiration. True manhood and womanhood come down like the new Jerusalem from heaven; are born out of the childlike spirit that first loves something glorious, and far above itself, and then by experience learns to organize that vision of the soul into common life.

The presence of this childlike quality is always felt in every thing done by the teacher. Her growth in real power is felt in the superiority of her whole influence over her class. Some women in our schools really do more for the growth of the children in a week than others in a life-time; and they do this because they are all the time getting nearer the real child, till their whole work is finally pitched on the key of childhood's noblest capacity. I remember well, some years ago, a fine Ger-

man girl came into my church choir to sing. She was a genuine little maiden, of the best type of her country women, and her brilliant solos hovered over and coquetted with the congregation till I almost began to feel the jealousy of my profession, that I had a rival at the other end of the church. By and by she left us, was married, and we did not see her for some years. But at last she came back to her place and sang again. But what a different quality was now in her voice! As she warbled through the mazes of Haydn and Beethoven, a wondrous stillness would come over the people; the tears would start up into old, faded, worldly eyes, and when she ceased every body breathed deep and looked about, as if they had wandered off into some half forgotten country. I no longer was jealous, but wanted to say, "Go on, sing to us through the whole service, for your songs touch a deeper place than my sermons can fathom." Where did this wondrous power come from?—for her scientific execution was not what it used to be, and she had lost two notes from the upper register. At last a good old lady explained it all: "Why, don't you understand, she has been singing to her little Hermann these two years." Yes, she had been two years singing herself out to her little boy, subduing his willfulness and soothing his fears, and waking up his little soul into consciousness by her voice. So, when she opened her mouth in church, we were all to her only a hundred children, and she singing of forgiveness, and mercy, and aspiration to us all. We did not "raise her salary" for that new quality of her voice; but we gave her our hearts, and, as we went out into the great, noisy world, resolved to be all of which she sang.

So have you only to go on living out the best and highest in you to those little children, and your quality will grow finer with every year. I have known a few women who seemed to have been elected to show what a glorious thing it is to be a mother of souls as well as a trainer of minds in the people's school. Once, after listening a whole evening, wide-awake, to the conversation of one of these women, a little boy said, just as he was going off to sleep, "Oh, mamma, how many little children that schoolmistress does love!" For he had seen and heard, with the inspired senses of a child, hundreds of little and big boys and girls that night. They had peeped out from her eyes; laughed and wept, and teased us in her voice, danced in her feet, and tossed ball with her fingers. She was herself all the time, and yet her better self was the innumerable com-

pany of little ones who had through gathering years found a home in her heart. And some of them had gone on; and now and then a peaceful look on her face told us what he meant who said: "Their angels do behold the face of the Father in heaven."

And do not feel that this fine quality will be wasted upon the mixed crowd of children of the people that throng our public schools. Here is the very place where it is wanted. If we are ever to have that "good time coming" in American society, of which the political newspapers prophesy on "off days", when they have nobody to abuse, it will come from a generation of children lifted to a plane above the coarse materialisms and vulgar ambitions that now desolate our new and noisy civilization; and you, next to the best of American parents, are to bring in this era, by living out this childlike spirit right in the midst of your crowded, restless, wearisome school life. They will catch the inspiration of it if you do not falter; and the feeble lift you give that wild-cat youngster, may be just the last effort that changes his destiny, and makes him a leader in righteous instead of reckless ways. The finest cuture, if it be culture and not veneering or paint, wears brightest and wins its highest crown when tramping along in the most common ways of common life. If you are a true child-woman in the common schools, you need not aspire to any better place than you have to bless the American people, whose servant you are.

Finally, your life in the schoolroom will be graceful to others and delightful to yourself, just as you toil in the work of preparation down in the deep places of the soul. All your life out of school is really the normal seminary where you may learn the methods of leading the spirits of these children through their routine of weekly study and toil. A few weeks ago I was taken to see a great establishment for printing muslins into calicoes. First, we were taken to the basement and shown the cloth, shaggy and dingy, as it came from the looms. Then it first was driven between sharp knives that sheared away its roughness. Then it flew over a hot roller that singed away the fuzz that remained. Across a hall it plunged into a series of boiling vats in a room that was like a witch's cavern of heat and dampness and noisome smells. Then it was bathed in fiery acids, and boiled in seething caldrons, and dried on steaming frames, all the time in motion, till it seemed as if the cloth would be torn in shreds and scattered to the winds. "For what is all

this?" said I. "That is what all this is for", said the janitor, pointing up to the roof. There, through the stifling steam, we saw, flying through an aperture in the wall, a line of cloth white as the inner leaves of the pond lily on a morning in July. Up a pair of stairs we mounted, and there, in a great room, the white cloth came up and flowed like a fleecy cloud into a vast machine out of which it fell, noiseless as a snow-flake, a printed web, to charm the eyes of a thousand country maids teasing the clerks behind the counters of a hundred country stores. The preparation was the vital point; once made ready to take and hold the colors, the work was almost done. So have I seen more than one schoolmistress preside so gracefully and easily over her domain, teaching minds and shaping souls as naturally as the birds sing and the waters dance. And then I have known that only out of deep sorrows and solemn questionings, through days of toil and nights of tears, perhaps through poverty or humiliation or blighted love, persisting all the while in her consecration to work, has this gracious girl come up to this place and been enthroned, even here on earth, Queen of Children and Mistress of Hearts; wearing on her brow the stamp of sovereign womanhood, worn only by her who endureth, believeth, and loveth unto the end.

EDUCATION IN ANCIENT GREECE.

The fundamental conception that every child belongs to the state, and is destined to a prescribed public service, had great influence in suggesting laws and shaping institutions in early Greece. This is particularly true of Sparta, where the grasp of civic power was fastened upon the babe in the nursery, and was not withdrawn from the veteran of three score years. Even in the Hellenic democracies personal independence was almost swallowed up in the duties of citizenship. The very conception which the Greeks held of right life, the essence of their religion, and the spirit of their education, tended to the suppression of individuality and the promotion of the state. The laws of Lycurgus assumed the power and glory of Sparta to be the objects for which the Laconian citizen existed. Military service was the Spartan's first and greatest duty. Hence military education was the chief concern of the state. Every male

child born in Sparta was a potential soldier, or nothing. The children of the Spartiatas were subjected to an examination soon after birth; the robust and promising were adopted by the family amid festive rejoicings, the feeble or deformed were exposed on bleak Taygetus. The barbarous custom of exposing infants was legally authorized in all the Grecian states excepting Thebes. Female children were frequently exposed, and sometimes condemned to immediate death. The laws and customs of Athens were more liberal and humane than those of Sparta. The far-reaching mind of Solon recognized in the generous education of youth a guaranty of the growth and permanence of the Attic capital. His laws held fathers responsible for the education of their sons, and aimed to foster popular culture without subjecting it to stringent state control. The Athenian family was freer than the Spartan. Individual liberty and the prevalence of mental activity made Athens the center of ancient culture. Athens stands for Greece; her life represents to us the best result of Hellenic civilization.

In the better class of Greek families the child, when formally accepted by the father, was entrusted to the care of a trained nurse, one from Lacedæmon being considered best. The nurse suckled her little charge, fed him honey, carried him much in the open air, dandled him in her arms, and sang him to sleep with lullabies. Great pains was taken to insure bodily health and symmetry even in babyhood. The child's body and limbs were shaped with the hands. No haste was allowed in teaching children to walk. Nurture and growth were superintended with a wise moderation that aimed at the sure if slow development of a strong, sound body. The Greeks well knew that nature can not be forced. They let the children have a long time and a good time in the nursery. Toys were provided in abundance, such as rattles, dolls, hoops, tops, and little wagons. Many juvenile games were in vogue, one of which was much like blindman's buff. The misdemeanors of the nursery were punished by the appropriate application of a slipper or sandal to the young Hellene's person. Sometimes the offender was terrified into submission by frightful stories corresponding to the "Raw Head and Bloody Bones" of modern times. On the other hand, obedience and docility were rewarded by copious narratives, usually of a marvelous sort from the rich repertory of fable and myth. Skill in story-telling was a chief accomplishment of the nurse. At the age of about six, the boys were

separated from the girls, put under the care of a pedagogue, and sent to school. The girls received little or no education except from their mothers and nurses.

The pedagogue was usually a slave of good character and education. "The democratic atmosphere of Athens", says Dr. Curtius, "was in favor even of the unfree class, and to the annoyance of the aristocrats encouraged the cultivation of humane and kindly relations between the master and the slave." Politeness and gracefulness of carriage were particularly valued in the pedagogue, who was expected to serve as a model of behavior to his charge. It was his duty to accompany the boys to and from the school and gymnasium, to carry their books and harp, and to exercise a general superintendence over their conduct. He gave incidental instruction and advice, but took no part in the regular work of the school. This was intrusted exclusively to the preceptor. The schools were all private. The state never entertained the idea of building schoolhouses, or supporting teachers at the public cost. But education was demanded and encouraged by law, and recognized by the people as an element of power. Almost all the Athenian boys were sent to some sort of a school for a longer or shorter time, according to the ability of their parents. The rich could command the best of teachers; the poor were obliged to accept inferior guides. As a rule, the office of preceptor was not in high repute. It was regarded as somewhat menial, and often fell to persons who were thought unfit to make a living in any other vocation.

The elementary Hellenic education was simple in kind and method. The art of reading was first taught, then the pupils were set to learning by heart passages from approved poets and moralists. The fables of Æsop and the poems of Theognis were among the text-books used. Homer, however, was the great fountain-head of instruction, the source alike of knowledge, patriotism, and religion. Next to Homer, Hesiodus furnished the Greek youth with material of education. This preliminary instruction was followed by a course including what were regarded as the two essential parts of education—Gymnastics and Music. Gymnastics included wrestling, dancing, and many athletic and graceful exercises; also, bathing, and whatever else conduces to perfect health, strength, agility, and physical self-control. Music comprehended not only singing and practice upon the harp, but grammar, geography, and mathematics,—in the lan-

guage of Grote, "every thing appertaining to the province of the Nine Muses."

Gymnastics and music, or physical and intellectual culture, were inseparably united. The body was considered as of equal importance with the soul. The sound body was thought essential to the sound mind. Curtius, in his admirable History of Greece, gives the following succinct characterization of the Athenian school culture:

"Grammar, music, and gymnastics exhausted the circle of teaching, the first two of these departments being closely connected with one another. For, when the boy had learned to read and write, he read the poets; he learnt to declaim them, and with the words appropriated to himself the wealth of their subject-matter. Reason and feeling, taste and judgment, were developed by his habituating himself more and more to the ideas of poets of high and universal reputation. The declamation of poems led to the accompaniment on stringed instruments, and to the accurate acquaintançe with the different rythms. The power of the musical art proved its elevating and refining influence upon the minds of the young, without the intentional character of moral instruction disclosing itself to them."

Cincinnati, O. W. H. VENABLE.

WHAT IS A SYCOPHANT?

There is in Greek the word "*sukophantēs*", which suggests by its form a derivation from *sukon*, a fig, and *phanein*, to show. This derivation has accordingly been generally adopted.

The following is from the first volume of Bailey's Dictionary, edition of 1759:

"SY'COPHANT [*Sycophanta*, L. of *sukophantēs*, of *ta sukophanteia*, Gr. an Informer among the ancient *Athenians*, who gave notice of the Exportation of Figs contrary to the Law] a false Accuser, a Tale-bearer, a Pick-thank, a Flatterer."

Ash, in the second volume of his dictionary, 1775, says:

"SYC'OPHANT (*s. from the Greek sukē*, a fig, and *phaō*, to tell, *one who informed against those who exported figs contrary to law*) A flatterer, a parasite, a mean, insinuating fellow."

"SY'COPHANT. *n. s.* [*sukophantēs; sycophanta*, Latin] A talebearer; a makebate; a malicious parasite."—*Johnson's Quarto Dictionary*, second vol., 8th ed., 1799.

It will be observed that Johnson gives no etymology of the Greek word. Latham, however, in the fourth volume of his edition of Johnson, gives the following in place of what Johnson puts in brackets:

"Gr. *sukophantēs*, from *sukon* — a fig, and *phainō* — show, denounce. To export figs from Athens was forbidden by law; and they who *informed* against persons disregarding this law were called *sycophants*]."

"SY'COPHANT, *n.* Fr. *Sycophantin;* Lat. *Sycophanta;* Gr. *Sukophantēs, apo tou suka*, from indicting persons that exported figs."—*Richardson's Dict.*, sec. vol., London, 1844.

"SYC'O-PHANT, n. [Gr. *sukophantē; sukos*, a fig, and *phainō*, to discover.]
Originally, an informer against those who stole figs or exported them contrary to law, etc."—*Webster's Dictionary*, 1859.

In the first two Greek words in the brackets, Webster made two blunders. It will be seen that these are corrected in the following from the revised edition of 1864:

"**Syc'o-phant,** n. [Fr. *sycophante*, Lat. *sycophanta*, Gr. *sukophantēs*, from *sukon*, a fig, and *phainein*, to show.]
1. Originally, an informer in Athens, who sought favor by denouncing those who stole figs, or exported them contrary to law, etc."

"SYC'OPHANT, n. [Gr. *sukophantēs*, one who informed against persons exporting figs from Attica, or plundering sacred fig-trees, a common informer, a slanderer; *sukon*, a fig, and *phainō*, to show; L. *sycophanta*, an informer, a flatterer; It. *sicofante;* Fr. *sycophante*]."—*Worcester's Quarto Dictionary.*

The following is the beginning of the second paragraph of Hume's Essay on the Balance of Trade (see Hume's Essays, vol. 1, p. 327, 1777):

"It is well known to the learned, that the ancient laws of Athens rendered the exportation of figs criminal; that being supposed a species of fruit so excellent in ATTICA, that the ATHENIANS deemed it too delicious for the palate of any foreigner. And in this ridiculous prohibition they were so much in earnest, that informers were thence called *sycophants* among them, from two GREEK words, which signify *figs* and *discover*†."

The reference is to the words "† PLUT. *De Curiositate*" in a footnote.

It will be interesting to inquire whence arose the story of the law against the exportation of figs from Attica. The following is from p. 77 of North's Plutarch. Plutarch flourished about 80 A.D.:

"This ordinance is in the first table of Solon's laws, and therefore we may not altogether discredit those which say, they did forbid in the old time that men should carry figs out of the country of Attica, and that from it came that these pick-thanks, which bewray and accuse them that transported figs, were called *sycophants.*"

Athenæus flourished about 228 A.D. The following is the sixth section of Chap 6, Book iii, of his Deiphnosophists or Banquet of the Learned:

"6. With respect to Figs.—The fig-tree, says Magnus, (for I will not allow any one to take what I have to say about figs out of my mouth, not

if I were to be hanged for it, for I am most devilishly fond of figs, and I will say what occurs to me,) 'the fig-tree, my friends, was the guide to men to lead them to a more civilized life. And this is plain from the fact that the Athenians call the place where it was first discovered The Sacred Fig; and the fruit from it they call *hegeteria*, that is to say, 'the guide', because that was the first to be discovered of all the fruits now in cultivation. Now there are many species of figs;—there is the Attic sort, which Antiphanes speaks of in his Synonymes; and when he is praising the land of Attica, he says—

A. What fruits this land produces!
Superior, O Hipponicus, to the world.
What honey, what bread, what figs!
Hipp. It does, by Jove!
Bear wondrous figs.

And Isistrus, in his 'Attics', says that it was forbidden to export out of Attica the figs which grew in that country, in order that the inhabitants might have the exclusive enjoyment of them. And as many people were detected in sending them away surreptitiously, those who laid informations against them before the judges were then first called *sycophants*. And Alexis says, in his 'The Poet'—

The name of *sycophant* is one which does
Of right apply to every wicked person;
For figs when added to a name might show
Whether the man was good and just and pleasant;
But now when a sweet name is given a rogue,
It makes us doubt why this should be the case.

And Philomnestus, in his treatise on the Festival of Apollo at Rhodes, which is called the Sminthian festival, says—'Since the *sycophant* got his name from these circumstances, because at that time there were fines and taxes imposed upon figs and oil and wine, by the produce of which imposts they found money for the public expenses; they called those who exacted these fines and laid these informations *sycophants*, which was very natural, selecting those who were accounted the most considerable of the citizens.'"

The following is from Book iv, Chap. xvii, of Sir W. Blackstone's Commentaries on the Laws of England. It contains some statements not found above. On what authority he makes them, I do not know.

"The laws of Draco at Athens punished it [theft] with death; but his laws were said to be written in blood; and Solon afterwards changed the penalty to a pecuniary mulct. And so the Attic laws in general continued; except that, once in a time of dearth, it was made capital to break into a garden and steal figs; but this law and the informers against the offence grew so odious, that from them all malicious informers were styled *sycophants;* a name which we have much perverted from its original meaning."

"We call a truckling and unscrupulous parasite a *sycophant*, because it once pleased the men of Athens to pass a law forbidding the exportation of figs from Attica; which, as is apt to be the case with such laws, was little more than a dead letter; while yet there were found in the community certain mean fellows who sought to gain their selfish ends by blabbing, or threatening to blab, of those who violated it (*sūko-phantēs*, 'fig-blabber.'"—*Whitney's Language and the Study of Language*, p. 130.

Donnegan, in his Greek Lexicon, says of the word *sukophantēs* that it is "*properly*, an informer against persons exporting figs

from Attica; *hence* (*from the character of such persons*), a slanderous accuser, a calumniator; one who gains a livelihood by litigious charges, *or* false accusations; a pettifogger."

Andrews, in his Latin Dictionary, under the word *sychophantā*, says, (orig., a fig-informer, *i. e.*, one who informed against those who exported figs from Attica contrary to law; hence, in gen.) "*An informer, tale-bearer, backbiter, slanderer, a deceiver, trickster, cheat..*" He also says, "sometimes for *A cunning flatterer, parasite, sycophant.*"

It seems that the fig-informer etymology of *sycophant* has been almost universally received. It may not, however, be the correct one. Mr. Shadwell suggested that *sükophantēs* properly meant "*a fig-shewer, i. e., one who brings figs to light* by *shaking* the tree,—the figs having been hidden in the thick foliage; hence *one who makes rich men yield up their fruit by informations, and other vile arts.*" In support of this view he cites certain Greek phrases, one of which is *seiein kai sukophantein.* This phrase a little changed occurs in Luke iii: 14, as the language of the Saviour to the soldiers, "*Mēdéna diaseisēte mēdè sukophantēsēte*", which our translators rendered, "Do violence to no man, neither accuse *any* falsely." Dean Alford, in his Greek Testament, vol. I., p. 424, in commenting on the last verb, says: "In assigning a derivation for this verb, notice Liddell and Scott's remark (after Passow): 'The literal signif. is not found in any ancient writer, and is perhaps altogether an invention." Liddell and Scott's remark is quoted also by Worcester even after giving and adopting the ordinary etymology. The sixth edition enlarged of Liddell and Scott (Oxford, Clarendon Press) does not contain the above remark, but it says that the fig-informer "explanation is probably a mere figment." It also says "the word is never used in the modern sense of *sycophant, i. e., kólax.*" See p. 1524.

Wedgwood, in the second and revised edition of his Etymology, p. 666, gives Liddell and Scott's definition—

"*Sycophant.* Gr. *sukophantēs*, a common informer, false accuser, slanderer, false adviser. The name would literally signify an informer about figs, from *sukon*, a fig, and *phainō*, to show, but there is no really historic knowledge how it arose."

It is a great blunder on the part of Wedgwood, to give only those definitions of *sycophant* which apply to the Greek authors, none of which, as stated above, agree with the modern meaning.

Having thrown a doubt over the ordinary etymology of *syco-*

phant, I shall close with the following quotations which give a clear description of a modern *sycophant*, whatever he may have been originally. This modern meaning arose in the Latin as early as Plautus, if Andrews's transferred meaning given above is correct:

"The moral sense and conviction of men is often at work upon their words, giving them new turns in obedience to these convictions, of which their changed use will then remain a permanent record. The history of 'sycophant' will illustrate this. You probably are acquainted with the story which the Greek scholiasts invented by way of explaining a word of which they knew nothing—namely, that the 'sycophant' was a 'manifester of figs', one who detected others in the act of exporting figs from Attica, an act forbidden, they asserted, by the Athenian law, and accused them to the people. Be this explanation worth what it may, the word obtained in Greek a more general sense; any accuser, and then any *false* accuser, was a 'sycophant'; and when the word was first adopted into English, it was in this meaning; thus an old poet speaks of 'the railing route of *sycophants*'; and Holland; 'The poor man that hath nought to lose, is not afraid of the *sycophant*.' But it has not kept this meaning; a 'sycophant' is now a fawning flatterer; not one who speaks ill of you behind your back; rather one who speaks good of you before your face, but good which he does not in his heart believe. Yet how true a moral instinct has presided over this changed signification. The calumniator and the flatterer, although they seem so opposed to one another, how closely united they really are. They grow out of the same root. The same baseness of spirit which shall lead one to speak evil of you behind your back, will lead him to fawn on you and flatter you before your face. There is a profound sense in that Italian proverb, 'Who flatters me before, spatters me behind.'"—*Trench's English Past and Present*, 6th ed., p. 269, 270.

A *sycophant* will every thing admire:
Each verse, each sentence, sets his soul on fire:
All is divine! there's not a word amiss!
He shakes with joy, and weeps with tenderness,
He overpowers you with his mighty praise.
Dryden. Art of Poetry.

Salem, Ohio, Dec., 1872. W. D. HENKLE.

THE OBJECT OF THE RECITATION.

Before a teacher can successfully hear classes recite, he must understand the object of the recitation. There are several reasons why pupils, after they have learned a lesson, come into the presence of the teacher to recite it. I wish to notice the four principal reasons.

1. EXAMINATION. The recitation gives the teacher an opportunity to ascertain whether the pupil has learned the lesson or not. The teacher assigns the class a lesson or task. In the

schoolroom or at home they work upon it. The recitation tests their work; shows whether they have really mastered it or not. The teacher, by appropriate questions, ascertains what they know about the subject. If this were the only object, the teacher could dismiss the class as soon as he was satisfied in his own mind that they had learned the lesson.

2. EXPLANATION. When the teacher gives out a lesson for the next day, it is sometimes necessary to explain difficult points in it. Usually, however, it is best to leave difficult points for the pupil to work out with the help of such explanations as are given in the book. When the class recites, the teacher should explain those points which, after a sufficient amount of study, are not clear to the class or to any one in it. However clear any explanation which the text-book may give, it *can not* anticipate and provide for every difficulty in the pupil's mind. The teacher can stop just where the difficulty arises and expand on that point, turning it over and over and illustrating it in various ways until it is clearly seen by the class or individual. The teacher, however, should constantly encourage the class to master every difficult point by their own unaided efforts. If they rely on the teacher to make every thing clear to them, nothing will remain clear in their minds. Generally, too, they will not understand class explanations unless they have studied the subject previously.

3. INSTRUCTION. The recitation gives the teacher an opportunity to supplement the text-book by such additional instruction as is needed. If he has a good stock of general information, he will be able to communicate many things and facts, bearing on the subject studied, which are not found in the text-book; and such information will be more easily remembered by the pupils, because it comes fresh from the teacher's lips and is not found in the text-book. Some studies give a wider scope in this direction than others. In teaching geometry, there is but little to be said aside from what is in the book. In geography a great deal can be said, for the reason that changes are constantly occurring in that class of facts taught in geography. Wars are waged; state boundaries and capitals are changing; population is increasing or diminishing; cities are burned; canals are dug; railroads are built; forms of government are changing; new discoveries are made, etc. The teacher should keep himself informed of all these things. He should be up with the times; and if the text-books are behind the times, he should supply

their defects. Some teachers carry this to an extreme. There is danger of this, if one is self-conceited and vain because he knows something that the book does not tell. Many teachers *almost unconsciously* feel that what they do not know is hardly worth knowing, and that what they do happen to know is of great importance.

4. EXPRESSION. This is a very important object of the recitation. By many teachers it is almost entirely overlooked. The pupil should be constantly cultivating the power of clearly and accurately expressing his thoughts. His influence over others will depend much upon his ability to *express himself.* In common conversation, in writting letters, in school meetings, and under numerous other circumstances he will need this power. The recitation affords unusual facilities for its cultivation. If a pupil says, "I know, but can't tell", he should be informed that it is part of his work to learn to tell what he knows. Every time a pupil recites, he should make a *little speech.* It may be short, consisting of but one sentence, or it may be several minutes in length, but it should be complete as far as it goes. His position should be upright and respectful. There should be no leaning on the seat or on another scholar. His voice should be distinct and used in a conversational tone. No mumbling, no gum or anything else in the mouth, and no peculiar tones should be allowed. The sentences should be grammatical and every word rightly pronounced. The teacher should notice and correct faults in all these directions. He should not do it bluntly, nor all at once, perhaps, if there are many, but kindly and perseveringly. Constant training of this kind will go far towards making, not only better speakers in the professions, but also better conversationalists in every-day life. The topical method of recitation is specially useful in securing this object of the recitation, which I have given last, but which is far from being least in importance.

Oberlin College, Ohio. R. T. CROSS.

In educating an American citizen, we are not training an English operative or a Chinese coolie. He may be a hewer of wood, but, if his life answers life's great end, he will also be a hewer of error.—ED.

THE CRUST OF THE EARTH AND BELOW.

Science is often brought into ill repute by the unfortunate tendency, which is well nigh universal, to accept without question any statement which appears in a book or even in a newspaper, or which may be sustained by one who is, perhaps, for the present, in the enjoyment of considerable scientific renown. Thus, what is affirmed as a conclusion of science to-day, may be denied to-morrow, and science is disgraced because self-contradictory. Scientific assertions and conclusions are negotiated entirely too freely. Persons accepting the same should look well to the indorsement. A very intelligent gentleman recently said to the writer that he believed the idea of the "Conservation of Force" was an exploded theory. He had read an article "somewhere", in which this grand conception, which lies at the basis of true physical science, was consigned to the grave as a visionary speculation, unsupported by facts. There are, in science, many problems of great antiquity that are to-day unsolved; yet it is by no means a rare experience to hear persons of very limited scientific attainments boldly pronounce a verdict upon these questions. The true scientist is most timid about making a positive assertion. Coming in possession of what he conceives to be a truth, he rests not until it is subjected the most trying and searching tests which can be devised by friend or foe.

Most people are quite familiar with the affirmation, so frequently and so freely made, of the existence of a molten, liquid sphere, upon which the crust of the earth rests as a thin shell. It is not with a view of adding anything whatever *new* upon one or the other side of this question that the present article is written, but rather to present the fact that it *is* a question, and to furnish many who have no access to the original papers or memoirs of the eminent scientists who are arrayed upon the opposite sides of the question, an intelligible statement of the condition in which the problem is at the present time.

In the first place, we do not yet have at our command sufficient data to enable us to arrive at a perfectly satisfactory solution of the problem. The rapid and wonderful advance in physical science during the past few years, enables us to attack the problem from many new standpoints, and, possibly, to correct many conclusions at which we long ago arrived, in the light of the facts then in our possession.

Let us first consider the most ordinarily accepted view of the question, with the reasons generally offered in its support, and after that the objections which have been urged—and recently with great power—against it.

That the interior of the earth is a fluid mass, has long been taught and believed by many. Volcanic phenomena, perhaps, first point in that way. In any direct examination of the subject, of course, very little has been done. From the surface of a sphere nearly 8,000 miles in diameter, we have penetrated to a depth of less than one mile; yet, even in these apparently superficial soundings, we have discovered much which is of great value in the solution of the problem. Measurements of temperature, made below the surface in various parts of the earth, point with a good degree of certainty to the fact that the temperature rises in a direct ratio as we descend towards the centre. Although considerable diversity is found to exist in the results of careful measurements, yet it is presumable that they are due to local, rather than general causes. These results indicate a rise of about 2° F. for every one hundred feet of descent. A simple computation shows that, at this rate, at the depth of twenty-five or thirty miles, a temperature of 3,000° F. would be reached,—a heat sufficient to keep lava in a condition of liquidity at the surface of the earth.

A question of the relation of melting point to pressure, arises here, which may be considered briefly at present, and taken up again further on. Water expands when changing from a liquid to a solid. If it, then, be subjected to great pressure, its freezpoint is lowered, and it has been retained in its liquid form at a temperature many degrees below its freezing point. Thomson, in 1850, pointed out this fact, deducing it entirely from theoretical principles, and his brother, Sir W. Thomson, verified the result experimentally. Ice, at a temperature of 4° below zero, F., has been melted by subjecting it to pressure. Most substances, however, expand when liquifying; and, in this case, the effect of pressure is the reverse of that upon water. Most substances, then, when subjected to pressure, must be brought to a higher temperature to produce fusion; and, since matter at the depth of twenty-five miles is subjected to immense pressure from the overlying crust, this will have the effect of increasing the thickness of the solid shell surrounding the molten nucleus. No very exact data are at hand, in regard to the relation of the melting point of rocks to the pressure under which they may

exist; but it is concludod by the advocates of this view, that it can not increase the thickness of the crust so as to make it more than 50 miles.

In addition to the arguments derived from increase of temperature observed in mines, deep wells, etc., there are some curious facts going to show that the interior fluid mass is subjected to lunar influence, exhibited in the production of tidal waves, as in the water upon the surface of the earth. This conclusion is founded upon a careful observation of volcanic phenomena, It seems to be shown during a recent eruption of Vesuvius, that the periods of violent eruption were related to the position of the moon. An analysis of some 7,000 earthquake shocks occurring during the first half of this century, according to Perry, demonstrate that "earthquakes are much more frequent during conjunction and opposition of the moon than at other times,—more so when the moon is near the earth than when it is distant, and also more frequent in the hour of its passage through the meridian."

That the figure of the earth is such as would be assumed by a mass of liquid matter in rotation at the known rate of the earth, is also a powerful argument in favor of internal fluidity.

Many other arguments, of a geological nature, might be presented, did time permit; but we prefer to proceed to consider the objections urged against this view.

First among these, or at least the one most commonly urged, is, that a crust, thin as that proposed, could never be formed without at once being re-melted by the fervid heat of the glowing mass beneath it. This objection appears to have little weight, since it must be remembered that the molten sphere has no source from which to make up for the loss in temperature by radiation, and no crust would be formed until the heat radiated from the outer surface was greater than that supplied from the internal nucleus in order to keep the whole in a perfectly molten condition, and hence a crust when once formed could not be again melted up or absorbed by the fluid mass below.

As before stated, the theory of internal fluidity has been long taught by geologists; but, within a few years, it has met with a most vigorous opposition at the hands of a few eminent mathematicians and physicists. One of the most important arguments against it, and one which has given rise to much discussion, is that founded upon the astronomical phenomena of pre-

cession and nutation. Most people are more or less familiar with that peculiar motion of the earth which gives rise to what we call the precession of the equinoxes, and in which the earth may be likened to a top set spinning with its axis inclined to a horizontal plane. The result of the movement is, that the axis of the earth, while constantly maintaining about the same angle to the plane of the ecliptic, is caused to describe the arc of a circle about the pole of the ecliptic. The cause of this is also well known to be the effect of the sun and moon upon the mass of matter upon the earth outside of a sphere whose radius is the polar radius. An eminent mathematician, the late Mr. Hopkins, of Cambridge, England, reasoned about as follows upon this problem: Every one is aware of the fact that, if a rigid vessel containing a liquid be suddenly moved, the liquid does not at once take up the motion of the vessel in which it is contained, but for a moment lags behind. Conceiving the action of the sun and moon upon the earth, in producing precession, to be made up of an infinite number of momentary impulses, were the earth a rigid shell, with an internal sphere of liquid matter, we should have this constantly resisting force in operation. I believe Hopkins was led to this consideration of the subject by an experiment in which it had been noticed that two clocks, alike in every respect but in the fact that one was provided with a solid pendulum and the other with a glass cup filled with mercury, did not agree in their motions. Hopkins, in a profound mathematical investigation, succeeded in obtaining an expression for the amount of precession annually in terms of the thickness of the earth's crust, and making this equal to the observed amount of precession (50.1 seconds annually), he arrived at the result that the thickness of the earth's crust can not be less than 800 or 1,000 miles. Computing the annual precession upon the supposition that the earth is entirely solid to its centre, the result of 51.35 seconds is obtained, agreeing very closely with the result of observation, which is a well-established constant. In basing upon this calculation the assertion that the earth has no molten sphere within it, Hopkins is supported the late Archdeacon Pratt, who has given great attention to the subject, Sir William Thomson, and other eminent scholars. On the other hand, many eminent men are entirely dissatisfied with the principle upon which the result is founded, and so distinguished a mathematician as Delaunay has attacked the problem, and arrived at the conclu-

sion that, as far as precession and nutation are concerned, a shell filled with a liquid mass will behave in precisely the same manner as a solid sphere; that the action of the sun and moon being of a continuous nature, the internal liquid mass will accompany without resistance the movement of the outward shell. Mr. Hennessy, author of "Researches in Terrestrial Physics", has recalculated the problem, arriving at the result that the crust of the earth can not be more than 600, nor less than 18 miles in thickness. In this view he is sustained by David Forbes and many others.

Another very strong argument against the hypothesis of internal fluidity, is known as the tidal argument, which was brought out about ten years ago by Sir William Thomson, and the substance of which may be found in Thomson and Tait's Natural Philosophy. In a paper communicated to the Royal Society in 1862, Thomson shows that, unless the earth be an extremely rigid body throughout, more rigid than steel for instance, it must of necessity give way to the attractive influence of the sun and moon to such an extent as to sensibly diminish the actual phenomena of tides and precession and nutation. The argument, although founded on mathematical and physical problems of considerable difficulty, may be briefly stated as follows: If the earth were a liquid mass, the influence of the attractive power of the sun and moon mould be to modify the form of the entire ellipsoid, producing, if I may so express it, tidal effect to the very centre of the earth. If now a thin layer of liquid of less density be spread over this mass, it will simply rise and fall with the movements of the liquid spheroid beneath it, and would exhibit in itself no perceptible tidal phenomena. He maintains that so thin a crust as is claimed generally by geologists, would not possess rigidity enough to resist this motion of the molten sphere beneath, and must, with the waters of the ocean, rise and fall in common with that interior tidal wave. Thus the tide would raise the land as well as the sea, and leave no perceptible tidal wave in the sea. The very existence, then, of tides is a proof of the rigidity of the earth. Sir William Thomson affirms that any degree of viscosity, such as is assumed by Delaunay, would, in a short time, result in the disappearance of all difference between summer and winter.

The only reply to this argument, which the writer has met with, is one by Mr. Hennessy before referred to, in which the value of the mathematical data is disputed. The names of

many eminent physicists and some geologists might be given as supporting the conclusions of Sir William Thomson. An additional proof of the solidity of the earth, resulting from the investigations of Bunsen and Hopkins, on the relation of the melting point to pressure, has already been referred to. From his researches, Bunsen inferred the solidity of the earth to its centre, although his right to do so has been questioned on account of the limited number of substances upon which he made his experiments.

In the foregoing, the writer has simply attempted to show that the question of internal fluidity is an open one. In a future paper will be presented some modern views and considerations concerning the causes of the configurations of the surface of the earth. T. C. M.

PRONOUNCING THE SYLLABLES IN SPELLING.

Should pupils pronounce the syllables when spelling? "Of course they should", is the answer of nearly every individual to whom I propound this question. With a motive a little stronger than Yankee curiosity, I ask emphatically, "*Why?*" Is it for the purpose of aiding the pupil in gaining a knowledge of the orthography of the word, or is it because we are trammeled by a custom whose absurdity is only equaled by its antiquity, and whose principles we dare not violate lest its adherents condemn our course? Manifestly it is the latter.

The younger pupils should be required to pronounce their syllables, in order to give them a knowledge of the representation of sounds by combinations of letters, but when the pupils are older I positively deny its efficacy. When the little child first learns his A–B–C's, the teacher points them out very carefully with his pencil or penknife. When the learner becomes a little more advanced, he allows him to point them out himself. Now imagine, if you please, an individual six feet tall running his finger over the page he is reading, in order to point out the words. It is equally absurd, it appears to me, for the same individual to pronounce each syllable in spelling a word, especially in a word similar to "unconstitutionality." In reading we omit the matter of pointing as soon as it is no longer essential. In the name of common sense, then, let us act similarly in the case of spelling.

In teaching the reading of numbers, we instruct the mem-

bers of the class to point them off into periods of three figures each, but, as soon as any proficiency is gained, we let the imagination supply the points, except in a few newspaper articles, in which I have seen something similar to this, $643.875. Can any one read it? Why, I ask, should we not adopt a like method in the case under discussion? Because a little child clings to the chairs in learning to walk, is that an indication that he must rely upon similar aids at a more advanced age of life?

This matter of pronouncing syllables finds remarkable favor among those who ranked as country school teachers in former times. One of these, who boasted that he had taught *twenty terms*, said to me once, "There is one thing I don't like about the way they spell now-a-days. They don't pernounce their syllables. Now a scholar don't know what he's a spelling unless he pernounces his syllables." I claim that he does know what he is spelling without any of the "pernouncing."

Some ask how I would have pupils distinguish the syllables and "not get them all jumbled together." The method is very simple indeed. Make a distinct pause after each letter or combination of letters composing the syllable. Thus, c-o-n, v-e-y, convey; c-o-n, s-i-s-t, e-n-t, consistent

But some inquire if this manner of spelling will ever receive the favor which we of the minority claim that it merits? In reply, I admit there is much prejudice against it. And why? Simply because it is entirely opposite to all our previous teaching in regard to the matter; it ignores what we have ever been taught to consider a prime virtue. Some years ago, when spelling schools were so popular, one of the great objects sought to be accomplished, was the training of the spellers in the pronouncing of the syllables, and so deeply have these principles been instilled into the minds of the people, that one might nearly as well interfere with their politics or their religion as to criticise or condemn them.

In introducing the new method into my own schools, I keep in mind this popular prejudice, and proceed only just so far as discretion will dictate. However, I look forward to the time when these new and improved methods of teaching, so rapidly being introduced, will take the place of the old, to be retained on account of *merit* only, and not out of pious regard for their sacredness acquired by their antiquated existence. May we of the minority not then *hope* for a change in this matter of "pernouncing" syllables?

W. H. PARCELS.

EDITORIAL DEPARTMENT.

——The Supreme Court of New York has decided that the Fourteenth Amendment of the Constitution of the United States does not prohibit boards of education from establishing separate schools for colored youth, inasmuch as this abridges no privilege of a citizen, since no citizen has the privilege of choosing the school in the city, to which he will send his children. The court adds:

"The relator has equal common school advantages with other citizens. He does not assert that the school which is open to him, is not as good as the one which is closed. He does not pretend that there is anything in its position, its pupils, or its teachers, which makes the limitation of his children to that school a practical refusal to them of common school advantages. If the school which is open to his children, were materially objectionable, or if it were an improper school for them to attend, a very different question might then arise."

This decision is substantially the same as the one given by the Supreme Court of Ohio a few months since. Both agree that the equality of rights guarantied by the Fourteenth Amendment, does not imply that white and colored youth shall attend the same schools any more than it necessitates the attendance of the two sexes at the same schools—a view held by us from the first. What the amendment plainly guaranties is, that the two races shall be provided with *equal* public-school advantages, and it is to be regretted that neither of these decisions unequivocally denies the right of school boards to maintain *inferior* schools for colored youth—an injustice much too common even in Ohio and New York. It is true that both decisions *imply* that the school advantages furnished must be equal, but something more than this is needed to correct the wrong.

——The *Nashua Telegraph* states that the first attempt to open the public schools of Boston to girls was made in 1790 by Caleb Bingham, the author of the "Columbian Orator", who secured the admission of girls in the summer months when many of the boys were out of school. In 1825 the schools were opened to girls, but they came in such numbers that, in 1827, Mayor Josiah Quincy had them closed on the ground that the experiment was a failure! But in 1830 the schools were again opened to girls, who, for the first time, were provided school advantages equal to those furnished boys. The city of Portsmouth, N. H., made no provision for the education of girls until 1815, and no institution for the special benefit of women existed in the state until 1823, when Adams' Academy was established in Derry with L. P. Grand and Miss Mary Lyon, who afterwards won an imperishable fame at Mount Holyoke, as teachers. There is still a considerable number of cities and towns in the country which do not furnish girls with high-school privileges equal to those provided for boys. As late as 1854, the course in mathematics for girls in the Cleveland High School ended with "quadratic equations" in alge-

bra! It was not until 1808 that the laws of any New England state recognized the fitness of woman to be a teacher in the public schools, and it took many years to overcome the prejudice against their employment; indeed this prejudice is still strong in many communities. We wish that some competent person would collect the facts relating to the admission of girls to the schools in this country, and also to the employment of women as teachers. These facts would make an interesting and suggestive chapter in the history of education in America.

——The discussion of the Bible question has given a new impetus to the denominational schools of the country. It is asserted by a number of the religious papers that the agitation of the question has already lowered the moral tone of the public schools, and that the amount and character of the moral instruction hereafter imparted will be entirely inadequate for the formation of the character of the young. This view is urged most strenuously by those who are directly interested in denominational schools, and the wish is doubtless father of the thought. Some, claiming to be the earnest friends and advocates of public education, urge that the public school should be limited to elementary education, and that all higher instruction should be left to the church and to private enterprise. It is held that the positive religious training of the denominational schools is needed to supplement and correct the non-religious education of the public school. It is not our present purpose to consider the merits of this plan. It is confronted by the fact that the great majority of American youth will receive no higher education than the public school furnishes. Hence public education must be made broad enough and high enough to meet the public necessities. The duty of all friends of public morality and religion is to stand by the public schools, demanding that their moral influence shall be made vital and effective. It may be difficult to define theoretically the limits of religious instruction therein, but in practice there is found very few serious difficulties. Experience has shown that the public school may be made as efficient in moral training as the denominational school, and this too without trenching upon sectarian beliefs or prejudices. In moral influence and training our best public schools may confidently challenge comparison with the denominational schools in this country or in Europe.

——We have already alluded to the fact that the new school law of Illinois provides that no teacher shall teach a common school who is not qualified to teach "the elements of the natural sciences, physiology and the laws of health, in addition to the branches previously required", and another section of the act makes it the duty of the State Superintendent of Public Instruction to carry this provision into effect. In May last Supt. Bateman issued a circular selecting botany, zoölogy, and natural philosophy as the "natural sciences" named in the law, and defining the "elements" with which an applicant for a certificate should be familiar. He also gave a list of books, including eight on physiology, four on

zoölogy, seven on botany, and six on natural philosophy, from any one of which a knowledge of the elements of the science treated may be learned. County superintendents were advised to organize institutes or classes for special instruction in the elements of the sciences named, and teachers were advised to form themselves into classes. So far as we are informed, the efforts of the State superintendent met with a prompt and earnest coöperation on the part of school officers and teachers. For several months past, we have heard little of the new movement, but we hope that the close of the year will bring a good report. In the enactment of the law, Illinois took a step in advance of all the other states in the Union, and it is hoped that the step was not so long as to cause a stumble.

—— The special report of Supt. Bryant, of Burlington, Iowa, on the "Relation between Language and Grammar", is a valuable paper. Such writers as Max Müller, Marsh, and Whitney are quoted to show the faulty construction of the standard text-books on English grammar, and Marcel and Marsh are cited to sustain the position, that the study of English grammar does not teach the pupil "to speak and write the English language correctly." Marsh says that "the forms of English are so few, its syntax so simple, that they are learned by use before the age of commencing scholastic study, and what remains to be acquired belongs rather to the department of rhetoric than of grammar." Marcel asserts that the "the most direct way of ascertaining this usage, is to frequent the society of well-educated people, and study the best writers." The conclusion to which Mr. Bryant comes is, that "the proper place of grammar is that of a reference book, to be used as a dictionary is used." He urges that the instruction in language in our schools should consist of "a series of language lessons, so clearly defined and so logically arranged that the principles of the language will be gradually and naturally unfolded to the pupil through his own study of the language." While we fully believe that the ability to speak and write correctly is to be acquired chiefly by speaking and writing, we can not advocate the *entire* omission of the study of English grammar in our schools. The facts and laws of language should certainly be reached through the use and study of language, but may not the subsequent study of a scientific presentation of these facts and laws be of practical value? We long since came to the conclusion, that the study of technical grammar should not be begun much earlier than the study of algebra, and that full two years of the time now devoted to grammar, should be given to *daily* instruction and practice in composition. Practical instruction in the correct use of language should begin at the cradle, and the primary and higher teacher should faithfully and systematically continue it, but this instruction should end in the study of language as a science. At least we are not yet satisfied that English grammar should be wholly excluded from our schools.

—— An editorial in a late issue of *The College Courant* opposes the establishment of a National University at Washington. The chief objec-

tion urged is, that the university "would draw injuriously upon the strength of our existing institutions, and yet it could not, at the best, produce a result as good as we now have." It is argued that its character or "level" would inevitably be fixed by the students, and that this level would probably be under that of Harvard and Yale, and at least a dozen of our existing colleges. It seems to us that this argument proves too much. We do not see how a national institution, combining "the characteristics of a common school far more than it would those of a genuine university", could draw away the students and professional resources of Yale and Harvard. The superior character of these institutions would, of course, insure their success. These universities are certainly not injured by the numerous inferior colleges of the country. Their only rivals are the institutions that come or are supposed to come nearest to their "level." But is there any ground for the assumption that the students would fix the "level" of the proposed National University? When the income of an institution depends on the number of students, it can draw to it, this may be true; but an amply endowed university can certainly fix the "level" of its students, and hence determine its own level. It is a want of endowment that lowers the standard of our higher institutions. We dot not see how the establishment of a true university of high grade at Washington can in the least cripple Yale or Harvard or "derange and demoralize the existing growth of higher education." On the contrary, we believe that such a university would supplement and thus assist our existing colleges, and that it would greatly promote higher education in the country at large. Of course this would depend on the character of the institution. The action of Congress should clearly be determined by the educational interests of the nation.

MONITORIAL DISCIPLINE IN ENGLISH PUBLIC SCHOOLS.

Prof. W. H. Young, formerly of Athens, Ohio, now United States Consul at Carlsruhe for Baden and Alsace-Lorraine, has sent us a very interesting epitome of the recent odd discussion in the English papers, chiefly in the *Times*, of the the oddest feature of English Public Schools. The discussion contains so much that is English, unique, and suggestive that we regret that we are obliged to condense the epitome to bring it within our space. We have made as few changes as possible, but that Prof. Young may not be responsible for the sketch in its present shape, we have given it an editorial position.

The term public school is commonly applied in England to such schools as Eton, Rugby, Harrow, Winchester, etc., which correspond with an American endowed boy's academy on the dormitory plan. Each school comprises several "houses" and about six classes called "forms", and is under the immediate management and instruction of ten to twenty assistant "masters" presided over by a "head-master", and subject to a corporate board of control. In all of these schools Monitoral Discipline

has prevailed more or less for centuries, with this striking feature, that all the boys in the lower "forms" are subject, not only in ordinary school discipline, but for personal service of whatever kind, as cleaning rooms, brushing clothes, bringing wood and water, all kinds of errand-running, etc., to the "sixth form", commonly limited in number from fifteen to thirty of the best of the most advanced boys, who are clothed with authority, and are held responsible for keeping order at all times, in study, in dormitory, on the play-ground, etc. This service by the lower form boys is called "fagging", and is enforced with rigor just as other discipline—the ashen rod being in constant use. Of the "sixth form" boys a designated few, called in the school "præposters" or "præfects" and in sports "leaders" or "captains", are of still higher authority—a sort of court of appeal, and the real disciplinarians of the school. A boy when abused may appeal to these, next to an "assistant master" (teacher), and finally to the "Head-Master" or principal; but these appeals are, in fact, almost never made. The "code of honor" is against it, and an English boy will bear almost any amount of cuffing, kicking, and beating before he will appeal. Of course such a system is liable to the grossest abuse.

Further, in these, as in other English schools, physical prowess in sports ranks little, if any, behind mental excellence. The "præfects" in the schools are "captains" in the field-sports and feel themselves responsible, rather to the English sport-loving public than to the school authorities, for the athletic proficiency of their several divisions. All of these sports involve a large amount of slang that must be familiarly understood to secure successful coöperation in such games as cricket, football, etc.

The case of discipline which gave rise to the recent discussion, is this: A præfect at Winchester sent for a "house" (the boys of a particular building) to examine them in their "notions", *i. e.*, perhaps, in their general schoolboy proficiency in matters out of study. One boy refused to come on the ground that, being a senior fifth-form boy, he could not be fagged. The præfects held a meeting, decided his conduct rebellious, and that he must be "tunded"—that is, should be whipped with ground-ash rods. The boy appealed to the Head-Master, who told him he must submit to the "tunding." The number of "cuts" which a præfect may give, is theoretically limited to twelve; in this case thirty were given.

A Mr. Maude reports the matter to the *London Times* as a specimen of "licensed tyranny", worse than any "bullying" (by which the English understand a large boy imposing on a small one), a gross relic of past centuries, disgracing English public schools, and demanding the interference of English public opinion for its suppression. He says a "tunding" is far worse than any master's flogging; the ash rod is large as the finger, three feet long, seasoned until tough as whalebone, and that not less than four must have been broken over the boy's back, leaving it in a condition horrible to be thought upon. The Head-Master, when appealed to afterwards, condemned the decision of the præfects, pronounced the punishment excessive, but only required of the "tunding" præfect a private apology, instead of expelling him and punishing his

associates. Mr. Maude had been five years at Winchester, and remembered scores of these "tundings", but never one so gross as that described.

Next a Mr. Fischer, in the *Times*, applauds Mr. Maude's "admirable letter", condemning without stint the "cruel and cowardly iniquity" long prevailing at Winchester; could give cases where the punishment had been more barbarous than garroter-flogging at Newgate; for the latter was inflicted by law, within legal limits, and in the presence of responsible officials, while the former was in violation of all law, and in the absence of all authority or protection to shield the lad from the anger of his schoolfellows; boys should be punished by the masters or in their presence, and the latter should not be allowed to delegate such authority to other boys; the system is brutalizing to punisher and punished—the one hardened by indulgence in cruelty, the other only maliciously biding his turn to inflict on others the harm he has received, and both made brutal and cowardly men.

A Mr. Lechmere deplores the public censure likely to fall upon his revered preceptors of a former generation as a result of Mr. Maude's painful letter. No such torture as "tunding" was known at this peaceful time; was four years a junior at Winchester and never knew a severer punishment than a moderate knuckle rap on the head, inflicted by præfects deemed "bullies."

An "Old Wykehamist" (Winchester was founded by Mr. Wykeham), who recently spent six years at Winchester, admits the main facts of the "deplorable case" reported by Mr. Maude, but protests against his conclusions as to the general condition of things at the school. The power of the præfects is limited by the right of appeal and their own sense of a grave responsibility, and "tundings are rarely and reluctantly inflicted, and only for grave moral offences and grave breaches of discipline." The system is perhaps wrong, because liable to abuse, but the "brutality", which Mr. Maude had so justly stigmatized, was very exceptional, as was proven by its general condemnation by even the friends of the system.

These letters call out the "victim", who speaks for himself, avowedly of his own will and motion, "in defence of my school." He thinks that a "Winchester tunding" is not, as alleged by Mr. Maude, "the most dreadful punishment imaginable." He says:

> "The tunding I received in the fracas, a month ago, had no such terrible effect as imagined. Played foot-ball after two days without the least inconvenience. Ground ashes not as 'tough as whalebone', but slight sticks rarely lasting for more than three or four strokes. The punishment I received is universally admitted (and readily by the præfect himself) to have been excessive; yet I firmly believe, as does every one else here, that there was no tyranny or brutality in the matter. On the contrary, it was done in an honest, though mistaken impression, that serious insubordination was intended by my refusal to obey him; hence, while his action may be condemned, he himself and his motives deserve respect", etc.

In the letters to his father, which are published, he states that he was little hurt; that he cared nothing for the "licking"; had contended for a principle, and, when this was decided against him, he went promptly

for his tunding. The præfect wanted to "argue the case", but he told him he had come for his "licking", and wanted it at once. It had since been admitted, on all hands, that the vote was wrong, and the punishment excessive in the number of strokes, but he was thoroughly disgusted with the fuss made over so small a matter.

In the course of the discussion, the "father of the victim" states that he had written Dr. Riddle (Head-Master of the school) immediately on hearing of the case, asking that the præfect be required, at least, to make a public apology to the boy. The Doctor replied in a letter of twelve closely written pages, admitting and deploring the facts, which were the result of "grave error of judgment and zeal for discipline." Not satisfied with this, he (the father) called a bishop into counsel, through whose intercession Dr. Riddle wrote again, saying the præfect had apologized to "the victim" in his presence, and adding, somewhat reprovingly, that the matter were better left where it was. He wrote again, offering to let the matter drop, if the apology were made known to the school. This letter being unanswered, after three weeks he resorted to the press.

These letters and statements subjected the system to a sharp discussion. "C. F." thinks the system not a bad one, if two things are clearly understood, viz., that an appeal will always be heard, and the præfect's punishing be limited to six cuts. The first rule would check abuse of power; the second would enable the præfects to settle many offenses "out of court", thus preventing the brutality sometimes disgracing schools. "M. A. Oxon" was at Winchester five years during the "peaceful times", spoken of by Mr. Leckmere, and could testify that the "tortures of tunding" were then not infrequent. For "going out of bounds during play hours", he and others had once undergone a præfect's tunding, in which he received twenty-five to thirty cuts, "laid on with such a will" that his "jacket was cut to ribands, and was never worn again", and his "arms and back were black and blue with wheals." "We were not, however, milksops in those days, and we bore with Spartan fortitude, and without a murmur, a punishment which now makes a cowardly, rascally 'garroter' howl and cry to the attendant surgeon for mercy." He had, however, hoped, until enlightened by Mr. Maude, that these tortures were gone by—the relics of a less civilized age. He describes the system as it was in his day, and adds that, while he endured it and was none the worse, he would not like to have a child of his subjected to a similar discipline. "W." gives a chapter of his experience from which it appears that he was subjected to the bullying of his schoolfellows. He states that he can give many instances of "præfect tyranny." "An Older Wykehamist" answers "On Old Wykehamist", and asks, "What's the use of an appeal *after* a thrashing?" and adds that an appeal before would provoke the ire of the præfects and the jeers of companions. He states that it was only three years since a præfect tunded, at one time, thirty or more boys for some trivial offense, and that he himself had received more than one hundred and sixty tundings, of from four to sixteen cuts each, in seven and a half years' attendance at Winchester!

Mr. Maude writes a second letter, answering the charges of "exaggeration." He reasserts that there is no limit to the power exercised by the

præfects, and shows that the right of appeal is of little value. He gives cases showing the barbarity of the system. About fifty boys were "licked" one afternoon for being absent from an "irregular" roll-call, "the floor of the room looking like a fagot yard." The Head-Master disapproved of the irregular roll-call, but excused the præfects "on the ground of an excess of zeal in performance of duty!" In one case the præfect gave a boy several cuts on the face ("facers"), because he was supposed to be "padded."

Edmund D. Wyckham states that he frequently witnessed abominable cruelty in the "peaceful times" of Dr. Williams; once saw a boy tunded with a cricket stump and lamed for life. The boys, on this occasion, rebelled, rescued the victim, and fell upon the præfects, and cuffed and kicked them out of the Common's Hall. After the boy had sufficiently recovered, he was publicly flogged by Dr. Williams for having resented a præfect! "An Old Winchester Præfect" gives similar testimony, and adds that the system is "an indefensible and barbarous practice", which should be ended at once and forever.

The system is as vigorously defended. "An Old School Disciplinarian" believes tunding to be infinitely better than caning by a master and less dangerous than knuckle hitting on the head; "save me from sly kicks and boxes." The system creates good feeling between the seniors and juniors—gives the former responsibility; the latter protection from bullies—and is "a good training for the world." Instead of making boys "weak milksops", it makes them "Englishmen like their ancestors." "A Wykehamist" is proud of the old school, and believes that præfects are highminded, deliberate, and just. His family had been connected with Winchester for fifty years, and he had neve before heard a complaint.

"W." thinks the less a master "thrashes" the better—it takes a rare man to counter-balance the mischief done by "perpetual lickings." When the boys do the flogging, the result is very different. They know each other's tricks and ways, and can be more just. The system protects boys from brutality. When in school he was brutally kicked by a big bully whenever sent above him in class. Such treatment was not possible at Winchester. "*The great distinguishing character of every judiciously managed English school is, that the boys are sure of being properly kicked!*" "By all means let the masters *control* the system and effectually punish its abuse, but as 'kicking' will go on in every big school, let my boys go where it is reduced to a system, in the hands of a recognized class."

"A Civilian", one of Dr. Arnold's Rugby boys, is gratified that, while many see no cure for the abuse of the system but its abolition, others see a good use in the government of the public schools through præfects. He was six and a half years at Rugby, and only knew two or three cases of gross injustice or cruelty, but remembers scores of cases of sharp caning of "fags" for impertinence, neglect of duty, etc. "This punishment was infinitely preferred to one hundred lines of Homer or Virgil." Under this system, hundreds of boys govern themselves "without the continued interference of the eminent man at the head of the school."

"Expertus" contrasts, at length, the monitorial or præfectorial system with the "system of lock and key, usher and spy, and Jesuitical surveillance." While the former is liable to abuse and needs to be carefully guarded, it is "wonderfully strong in the argument from general success, from the characters which it has helped to train, and from the qualities it has naturalized in Englishmen."

A former "Acting Head-Master at Rugby", Sir Bonamy Brice, also thinks that the excellence of the system has been abundantly proven by its success. To train great schools to govern themselves is a task of great responsibility, and mistakes will occur, as in all human government. He asserts that it would be easy to array a terrible catalogue of abuses or failures in the opposite system.

A number of other letters, *pro* and *con*, have been published, among them a card by Dr. Riddle, stating that the whole matter had been referred to the Governing Body, then in session, for examination and action. The decision, which we have not yet seen, was looked for with great interest when our correspondent wrote. It is probable that this discussion will result in a modification of the monitoral system, but we do not look for its immediate abolition. It is too characteristic of the English people.

GOVERNOR NOYES ON NORMAL SCHOOLS.

The recent message of Governor Noyes, of Ohio, is remarkable for its strong utterance in favor of normal schools. After calling attention to the necessity for codifying and revising the school laws, he recommends three measures for the improvement of the public school system, to wit: 1. Normal Instruction. 2. County Superintendency. 3. The Township Organization. The Governor adds:

"I have mentioned normal instruction first, for the reason that I believe it to be the most important. We can not have good schools without good teachers, and we can not have competent teachers unless they are properly instructed in their duties. County superintendency might, and undoubtedly would, somewhat assist, but the fact is, the lack of competent superintendents is quite as great as the scarcity of good teachers. We want normal schools to instruct both, and these schools the state ought to supply. Until we have them, a large portion of the enormous sum expended for educational purposes will be thrown away. It is undoubtedly true that the schools in our large towns and cities, compare favorably with those of other states, but even these ought to be improved. It is certainly true that our country schools are inferior in many respects. An effort should be made to elevate the standard of these schools, so that all the children of our state may enjoy equal advantages. It should be a subject of inquiry, as to what constitutes the difference between the city and the country schools, and there should be such legislation as will give the greatest possible advantage to the greatest number of our youth. In my judgment our first necessity is normal schools, permanently located, created, supported, and regulated by the state; these, for the present, at least, to be supplemented with normal instruction upon the institute system, reaching into every country, and under the control of a state board. Reasonable expense incurred in promoting

the intelligence of the people, will be found judicious and economical. Common school education is the basis of our prosperity, and it should be made as complete and excellent as possible. I have no doubt that with normal schools to educate teachers and superintendents, we should reap from the money now expended, double the benefit we at present enjoy. Until we have such institutions, our schools will always be inferior. I respectfully urge this subject upon your attention, and take pleasure in referring to the very able report of the State School Commissioner, which will soon be laid before you."

Whatever may be true of the relative importance of the three measures named by Governor Noyes, all intelligent friends of public education will thank him for his earnest advocacy of normal instruction. No previous Governor of Ohio, for twelve years past, at least, has given this measure an earnest support. In the order of time we see no reason why the last measure named (the township system) should not be first.

EDUCATIONAL INTELLIGENCE.

—— The editor's absence during the first two weeks of January, prevented an early issue of this number. A good number issued a little late, is better, we think, than a hastily edited number issued on time.

—— Our educational exchanges have begun the year hopefully, and several of them have improved in appearance as well as in contents. For $2.50, we will send the National Teacher for 1873 and any one of the other educational journals whose subscription price is $1.50.

—— In an address at the recent dedication of the new Jefferson School, Washington, D. C., Secretary Northrop, of Connecticut, strongly condemned the too prevalent practice of sending American boys to European schools. Prof. Tyndall, who followed, heartily indorsed Mr. Northrop's warning.

—— The educational service in Japan proposed to Hon. B. G. Northrop has been indefinitely postponed—so he states in a contribution to the *Christian Union*. A new and comprehensive school system has been formed, and while there is opposition, there is no thought of retrogression. A movement has been inaugurated looking to religious liberty. Mr. Mori has addressed a remarkable memorial on the subject to the Prime Minister of the Japanese Government.

—— The consolidation of Union College, Dudley Observatory, and the Albany Law and Medical Schools into the "Union University of New York", is an educational event of considerable importance. The college will remain at Schenectady and the other departments at Albany, the two cities being only thirty minutes apart. "Engineering, Chemical, and Scientific Schools", and a department of "Theological Instruction" under Dr. Taylor Lewis, are to be opened at Schenectady. The policy of

strengthening existing colleges is wiser than the multiplying of weak and struggling institutions.

—— The House of Representatives has passed a bill, by a vote of 103 to 54, providing that Ohio, Indiana, and Illinois shall be paid, in money, the two-fifths of the five per cent of the net proceeds of the sale of the public lands within their limits, due by virtue of the act of March 3, 1857. This two per cent reserve fund, due these three states, amounts to $1.300,000, of which Ohio and Indiana are entitled to about $400,000 each, and Illinois to about $500,000. This money, when received, should be appropriated to public education. Ohio should set it apart as a normal instruction fund.

—— While Harvard University is not yet disposed to throw open its doors to women as students, it has adopted a plan to encourage their higher education. It is proposed to hold annual examinations for women, and to grant those whose attainments reach the required standard, certificates showing their proficiency. These certificates will be issued by the university, and will possess nearly the same value as diplomas. The English universities have pursued this plan since 1861, and the number of candidates has greatly increased from year to year.

—— The eight State Normal Schools of New York are unusually full this term. The number of students who have declared their intention of teaching in the schools of the State, and have received appointments from the State Superintendent, is as follows: Albany, 285; Buffalo, 164; Fredonia. 160; Oswego, 256; Cortland, 241; Genesee, 143. The number at Pottsdam and Brockport is not reported. This indicates an increasing public appreciation of normal training in the Empire State.

—— Mr. Briggs has succeeded O. Hosford as State Superintendent of Michigan. Mr. H. has filled the office eight years. We have searched the recent numbers of the Michigan journals in vain for his successor's full name.—— Joseph H. Speed has succeeded Joseph Hodgson as State Superintendent of Alabama.—— Francis Lieber, LL.D., of Columbia College, N. Y., died recently, in the 74th year of his age. He was distinguished as a student of political science.—— Gen. F. A. Walker has been appointed to the chair of History and Physical Geography, at Yale, in place of Prof. Gilman, who has accepted the presidency of the California University.—— Dr. E. O. Haven has resigned the presidency of the Northwestern University, at Evansville, Ill., to act as secretary of the board of education of the Methodist Church.

—— Barnard's *American Journal of Education* for 1873 (Vol. XXIV) will be chiefly devoted to superior education in different countries, and all the articles will be new. Dr. Barnard hopes to make this closing volume the best of the series. It will include a general index of all the volumes, and will contain over one thousand pages. The *American Journal*, as heretofore, will be issued quarterly, at the low price of $4.00 a year. The previous volumes, in cloth binding, may be bought for $4.50

each; in sets, for $4.00 a volume. Address, Henry Barnard, Hartford, Ct. Until May 1st, we will send to one address, *Barnard's American Journal of Education* and THE NATIONAL TEACHER for $4.00. We make this liberal offer to assist Dr. Barnard in his great enterprise.

—— THE Thirteenth Annual Meeting of the National Educational Association will be held in Elmira, New York, on the 5th, 6th, and 7th days of August, 1873. Free return tickets are already promised on the N. Y. & Erie and the other railroads centering in Elmira. A cordial invitation to hold the meeting in that city has been received, signed by the Mayor and Aldermen, and sixty-five prominent citizens, including judges, editors, presidents of banks, clergymen, lawyers, and the officers of Elmira College. A warmer welcome was never promised to the Association. No effort will be spared to render this meeting interesting and profitable. A large attendance is anticipated. Details as to hotel and railroad facilities, topics, and lectures will be seasonably given.

BIRDSEY GRANT NORTHROP, *President.*

S. H. WHITE, *Secretary.*

RHODE ISLAND.—The meeting of the Rhode Island Institute of Instruction, held in Providence, Jan. 9, 10, and 11, was the largest educational convention which we have ever had the pleasure of attending. Music Hall, which has seats for twenty-five hundred persons, was filled at both of the day sessions of Friday, and, in the evening, it was densely crowded, every foot of standing room being occupied, and hundreds failed to gain admittance. It is estimated that over three thousand persons were present. The number of teachers who attended the meeting, was not less than one thousand, and all, not residents of Providence, both ladies and gentlemen, were hospitably entertained by the citizens. These facts show a public interest in education which, we think, is not exceeded in any state in the Union; and yet, less than thirty years ago, it cost three thousand public addresses, fifteen hundred of which were delivered by Dr. Henry Barnard, then State Commissioner, to create a state school system in Rhode Island! Dr. Barnard states that a public meeting was held within three miles of every home in the State, and that not less than sixteen thousand pamphlets and tracts, containing not less than sixteen pages each, were gratuitously distributed! Not a little of the present interest is due to Commissioner Bicknell, who is emphatically a live school officer.

The exercises of the Institute were also worthy of notice. The forenoon of the first day was spent in visiting the State Normal School and the Providence High School. In the afternoon the lower schools of the city were open to visitors, and the Department of Higher Instruction met in the high school building. Excellent papers on "Methods of Teaching the Ancient Languages", and "The Importance of Mathematical Studies in Literary Pursuits", were read, respectively, by Prof. Albert Harkness and Prof. B. F. Clarke, both of Brown University. In the evening a fine audience assembled at Music Hall, to listen to an address on "The True Education". Friday was the working day of the session.

Prof. S. S. Greene, of Brown University, read an able paper on "Thought and Expression", and Prof. J. L. Diman, also of Brown, gave an excellent lecture on "The Teacher's Culture". Both topics were discussed. Prof. Lewis B. Monroe, of Boston, conducted, in an admirable manner, an "Exercise in Reading", the pupils of the State Normal School forming the class. The exercises of Friday evening consisted of brief addresses by Governor Padelford, Mayor Doyle, Dr. Kingsbury, President Robinson, Dr. Barnard, Commissioner Bicknell, and others, interspersed with readings by Prof. Monroe, and singing by the young ladies of the Providence High School. Saturday morning was devoted to a lecture on reading, by Prof. Monroe, and the transaction of business. Prof. Merrick Lyon, of Providence, presided with great acceptance.

KANSAS.—The meeting of the State Teachers' Association, held in Humboldt, Dec. 25th, 26th and 27th, 1872, was not largely attended, owing to the severity of the weather. The Association was welcomed by W. R. Spooner, formerly of Ohio, who congratulated the members upon the educational progress of the past year. State Superintendent McCarty gave an able address on the changes needed in the school system of Kansas. He advocated (1) a state board of education, with power to grant state certificates to teachers, entitled to receive them; (2) the adoption, by state authority, of a uniform series of text-books for all the schools of the state; (3) a compulsory law, which shall forbid the detention from school of children between the ages of eight and fourteen years; (4) a state reform school; (5) a system requiring teachers to visit parents: (6) the adoption of the township system; and (7) a reduction in the number of hours of study required of children. Most of these recommendations were subsequently indorsed by the Association. Prof. M. L. Ward, of the Ottawa University, read a paper, in which he urged that the denominational colleges supplement, and are not antagonistic to the public schools. He held that state universities are as yet experiments, and that their permanent success is to be demonstrated. Col. J. F. Horner, of Labette county, read a paper on normal schools, urging that an elementary normal school should be established in every county, and that the State Normal School should train teachers for schools of the higher grades. Supt. Wheeler, of Ottawa City, read a paper on the orderly development of the mind, and Supt. Bishop, of Saline county, gave a lecture on culture and civilization. After a long discussion, the management of the *Educational Journal* for 1873 was assigned to the present publishers, Messrs. Banfield & Dilworth. The Association meets next August, in Ottawa City.

TENNESSEE.—The State Teachers' Association met in Nashville, January 22d and 23d. The attendance was not large, but the exercises were earnest and important. The chief topic considered was the educational needs of Tennessee, and this was patiently and thoroughly discussed, not only by educators, but by ex-Governor Brown, Judge Watson, and other leading citizens of the state. The present county system, "a system without head or tail", was strongly condemned. The General Assembly

was memorialized to enact a school law combining the state and county systems, with a state superintendent of education, and authorizing state and local taxation for school purposes. A bill embodying these recommendations has been prepared. One of the funny things connected with the discussion was the speech of Prof. Randall, of McKenzie, who opposed public schools because "they break down and ruin private schools." A letter from Dr. Sears, agent of the Peabody Fund, was read. It urged the creation of the office of state superintendent, and strongly commended the services of J. B. Killebrew, the agent of the State Association. This meeting is an indication that Tennessee will soon see that public education is her highest interest.

KENTUCKY.—The Louisville Educational Association held an interesting meeting Saturday, Jan. 11th. Prof. Roberts gave a lecture on mental arithmetic, in which he condemned "the excess of verbiage" often required of little children in the solution of problems. Dr. J. B. Reynolds gave an able and instructive lecture on corals and coral islands, illustrated by numerous specimens. The abstract of the lecture published in the *Courier-Journal*, shows much research and a thorough knowledge of the subject. Prof. Chase treated the subject of composition in a very satisfactory manner. The Association adjourned to meet in February.

OHIO.—Governor Noyes states in his message, that unless something is speedily done by the state for the two state universities, at Athens and Oxford, "their doors must be closed." The propriety of changing one or both of these institutions into normal schools, is suggested. If the funds of the two universities can be united, so as to afford support for one, the Governor suggests that the other be made a normal school, to be supported entirely by the state. We have believed for years that the changing of the Ohio University into a first-class normal school would be a decided advantage, not only to Athens, but to the cause of education. There may be a legal difficulty in the way of a transfer of the Ohio University funds to Miami, (or *vice versa*,) but the state can unquestionably use these funds for the support, in part, of a normal school at Athens. The funds of the Illinois University were used as the foundation of the Illinois Normal University, now one of the largest and most successful normal schools in the United States. The suggestion that both of the state universities be converted into normal schools, is certainly worthy of consideration.

COLUMBUS.—The "First Annual Report of the Board of Education" for the school year ending Aug. 31, 1872, is on our table. It is called the "first" report with some propriety, for only one other report has been published since 1857. This report of 1872 is worthy of an annual succession. It is a handsome document of 216 pages, and contains the reports of the President, Secretary, and Superintendent, with the questions used in the annual examination of pupils and teachers, full statistical tables, time tables, by-laws and regulations, the courses of instruction in the several grades of schools, etc. President Fieser discusses briefly

but ably the necessity of the special training of teachers, the "New Departure" (the employment of lady principals), the "mechanical" and "intellectual" methods of teaching, and several other topics. He says truly that scholarship is one thing and the art of teaching quite another; and, respecting the propriety of permitting teachers to learn this art in the school-room, he asks this question: "Should our little ones be used as victims for the experiments of persons who try to learn in the school-room what they should know before they enter it?" He concedes the success of the first year's trial of the experiment of lady principals, but, with the superintendent, questions "the wisdom of that very modern system which, if logically carried out, would eventually lead to the banishment of man from the school-room, and deprive the scholars of that vigorous masculine influence which is considered so necessary even in the family relation." Superintendent Stevenson's report is a very complete and practical presentation of the progress and condition of the schools. It is not only replete with valuable information, but several important topics, as "Examinations", "Professional Training", and "Supervision", are ably and quite fully discussed. We wish that his well-considered views respecting the extent and limitations of supervision could be read by every superintendent and principal in the country. We select the following statistics: Number of youth between five and twenty-one years of age in 1871, as enumerated, 10,117; number of seats for pupils provided, 5,379; number of different pupils registered, 5,478 (high school, 211); average number in daily attendance, 3,724 (high school, 163); number of cases of tardiness, 8,340; number of teachers employed, 105; salaries of teachers, three superintendents, and janitors, $75,783.71; other current expenses, $9,703.51; sites, buildings, repairs, and interest, $50, 265.95.

Ohio Agricultural College.—At the recent meeting of the trustees of this institution, the following strong faculty was elected: Agriculture and Botany, Dr. N. S. Townshend, of Lorain county; Geology, Edward Orton, of Antioch College; Chemistry, S. A. Norton, of Cincinnati; Physics and Mechanics, T. C. Mendenhall, of Columbus; English Literature, Joseph Milliken, of Butler county; Language [Latin and Greek?], W. G. Williams, of Ohio Wesleyan University. Senator Patterson, of New Hampshire, has not yet accepted the presidency, and it is thought that he will not. The appointment of the faculty has revived the newspaper controversy relative to the design and scope of the institution. One party urges that its plan should be broad and comprehensive; that it should be started, as the Governor advocates, "with the intention of making it ultimately a grand state university, whose instructions shall be thorough and comprehensive." The other party demand that it be made strictly an "Agricultural and Mechanical College." The serious difficulty which confronts the "broad" plan, is a want of funds. A great university requires a large money foundation. The "logic of events" will doubtless settle the question.

Errata.—We notice several errors in this number. For "their", p. 61, l. 3, read *her;* for "On", p. 66, l. 41, read *An;* for "neve", p. 67, l. 27, read *never;* and for "country", p. 68, l. 2 from bottom, read *county.*

BOOK NOTICES.

THE POPULAR SCIENCE MONTHLY. Conducted by E. L. YOUMANS. D. Appleton & Co., New York.

This old and honored publishing house is doing in many ways a great work for modern science. It has already published many valuable scientific works, and now has in hand the publication of the International Scientific Series, which will furnish to American readers a large number of special treatises on a wide range of subjects, prepared by men of the highest standing in their several spheres of investigation. The *Popular Science Monthly* covers a somewhat different ground, and, each month, furnishes interesting and valuable articles on the many phases of scientific inquiry which are of more popular interest than technical science itself. Truths lie in groups, and when new facts are discovered in nature, we need to know the relations and bearings of those facts to other parts of the domain of truth. Until such relations are understood, the facts often remain in startling isolation, and, not knowing what to do with them, the world is disposed to deny them.

There are two distinct things to be done in science. One is to discover, and the other is to make the highest use of the discovery. The discoverer may be so absorbed with his work as to think of little else. But his facts, and the necessary deductions from them, must be brought into harmony with other facts and deductions, and thus truths are gradually becoming grouped. It is in this peculiar department that there is great activity to-day, and all intelligent men are watching for the reconciliation of facts and truths independently obtained. There are often such difficulties in the logical determination of the values of facts, that we have often two or more parties, each earnest in the advocacy of its own interpretation. For example, Darwin represents one extreme, Agassiz another, in explaining the origin of species. Neither disputes the accuracy of the other's facts. Tyndall finds in his own department of physics such a uniformity in the relation between physical causes and effects, that he would remove from nature generally all such interventions of the Divine Will as could be termed providences. On the other hand Carpenter, an equally profound investigator of science, finds in nature abundant proof of Mind and Will. So, in many other questions, the true logical bearings of scientific facts are in dispute. But it is in the conduct of these controversies that we find much of the value of the scientific labor of our day. These discussions have a stimulating and quickening power, and thousands of minds are made the more active and wakeful. To most, the simple facts, *as such*, have little interest; but when in them are involved inferences and deductions, bearing favorably or unfavorably upon the old and venerable opinions of mankind, we are stirred, and want to know more of the matter.

It is into questions like these that the *Popular Science Monthly* plunges boldly. It gives the views and thoughts of many able men. Many of these views are purely theoretical, and may or may not be accepted. They are not SCIENCE, but they pertain to science. Science is strictly

what is known. The theories of scientific men may or may not be true. The advocates of opposite views can not both be right, and yet their discussions may have great value, and will help to prepare the way for a future elucidation of the final truth. With this simple statement of the characteristic feature of the *Science Monthly*, we cordially commend it to the patronage of our readers. E. B. A.

LITTELL'S LIVING AGE. Littell & Gay, Publishers, Boston.

This superlative weekly magazine loses none of its vitality by age. It is emphatically a *Living Age*. For nearly thirty years it has furnished its readers such selections of the best current literature as ought to have made them all happy and wise. The editor has rare gifts of culling. One would have thought that before this time he would have fallen into some groove, such as might befit his own personal and peculiar tastes, but all things are his, and under his guidance the reader wanders over many fertile fields. The chosen stories are choice and excellent; the poetry is generally pleasing, often inspiring; the articles on the modern aspects of scientific thought are always vigorous and able, while the selections in more general literature leave nothing to be desired. It is a library in itself. Its weekly visit is hailed with delight, and it generally has something to interest every member of an intelligent family. Even the maid in the kitchen devours hungrily the weekly feast of the serial stories. It is in very many homes almost a necessity of life, gratifying a pure taste, which it also helps to create and foster. That was by far the finest tribute ever paid to the memory of the late Daniel Webster, which was uttered by an old Marshfield neighbor at the funeral: "The world will be lonesome without thee." So high do we rate the merits and worth of the *Living Age* as a weekly visitor, so much instruction and delight do we get from it, that our fireside life would be most "lonesome" without it. E. B. A.

SMITH'S CONDENSED ETYMOLOGY. New York: A. S. Barnes & Co.

One excellent feature of the little work before us is, that it devotes a fair amount of space to Anglo-Saxon roots; but we notice many words wrongly classified, and a few placed under primitives from which they can not be derived; yet a careful teacher will not trust implicitly to one author in the study of words, and would, therefore, guard against such errors. We find much to commend in this little work, and regard it favorably for use in elementary schools. E. H. C.

—— LIPPINCOTT'S MAGAZINE (J. B. Lippincott & Co. Philadelphia) has entered on its sixth year with a high reputation, both for the excellence of its contents and the neatness and beauty of its appearance. It is the aim of the conductors to make it a model of literary and mechanical excellence, and they are certainly to be congratulatad on their success. The readers of the magazine for 1873 are promised a new serial story, "Malcolm," by George Macdonald, "the masterpiece of its author", sketches of travel, profusely and beautifully illustrated, papers of science and art, life and manners, etc., etc. The subscription price is $4.00 a year. For $4.50 we will send THE NATIONAL TEACHER and *Lippincott's Magazine* to one address for one year.

—— SCRIBNER'S MONTHLY for February contains three beautifully illustrated papers—"The Tehuantepec Canal", "In and Around Bangkok", and "How Men Learned to Analyze the Sun"—and a great number and variety of other interesting papers. The chief attraction in the department of stories is the fourth chapter of "Arthur Bonnicastle", by Dr. J. G. Holland. This is one of the best stories of the day. "Topics of the Time" and "Culture and Progress" are full of interest, as usual. *Scribner's Monthly* has won a popularity which promises it the largest circulation of all the literary monthlies. Price, $4.00 a year. Scribner & Co., New York.

—— THE LADIES' REPOSITORY for January fully sustains its high character, as a literary and religious magazine for the family. It contains eighty super royal octavo pages, double column. and is filled with a great variety of contributed articles, and a well-conducted editorial department. The number is embellished with two choice engravings—"Spring Time", and a portrait of Bishop Wiley. The *Repository* is published by Hitchcock & Walden, Cincinnati, at the low price of $3.50 a year.

——THE COLLEGE COURANT is a large weekly journal, devoted to the interests of colleges. universities, and other institutions of higher education. It excels all the other college journals in the ability of its articles, the range of topics discussed, and the fullness of its intelligence, for which it is not always careful to give due credit, The issue of Jan. 14th contains our recent notices of Oberlin College, the Toledo University of Arts and Trades, and Marietta College, making more than a column, but only the last is properly credited. The subscription price is $4.00 a year.

—— THE CHICAGO TEACHER resembles *The Nation* in style and form, though the page and type are both smaller. We read the January number through, and found it a very promising first issue. The editorial department is rich in practical thoughts and suggestions, concisely and strongly expressed. If the editors devote as much thought and labor to the succeeeding numbers, *The Chicago Teacher* will unquestionably take high rank as an educational journal. It is edited and published by Baker & Mahony, Chicago, Ill; $1.50 a year.

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A SHORT COURSE IN LITERATURE. By John S. Hart, LL.D. Philadelphia: Eldredge & Bro.

OLIVER OPTIC'S MAGAZINE. Bound Volume, 1872. Boston: Lee & Shepard. Subscription price, $2.50 a year.

THE DRAWING BOOK. Parts 3 and 4. By Walter Smith. Boston: James R. Osgood & Co. Price, $5.00.

INDUSTRIAL DRAWING for Beginners. Free-Hand. By Walter Smith. Boston: James R. Osgood & Co. Price, ——.

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Annual Report of the Public Schools of Steubenville, O. M. R. Andrews, Supt.

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Fifteenth Annual Report of the Public Schools of Middletown, Ct. Henry E. Sawyer, Prin'l.

School Laws of Missouri. John Monteith, State Supt.

Eleventh Annual Catalogue of the Public Schools of Tiffin, O. H. B. Furness, Supt.

First Annual Report of the Public Schools of Columbus, O. R. W. Stevenson, Supt.

Twenty-Ninth Annual Report of the Public Schools of Rochester, N. Y. S. A. Ellis, Supt.

Twenty-fifth Semi-Annual Report of the Superintendent of the Boston Public Schools. John D. Philbrick, Supt.

Annual Report of the Public Schools of Newport, Ky. W. H. Jones, Supt.

Annual Report of the Union Schools of Gallipolis, O. J. S. Wilson, Supt.

Forty-sixth Annual Report of the Ohio Institution for the Deaf and Dumb. Gilbert O. Fay, Supt.

Second Biennial Report of the Arkansas Deaf-Mute Institution. E. P. Caruthers, Principal.

Annual Report of the President of Brown University. Rev. Dr. Robinson, President.

Manual of the Public Schools of Providence, R. I. Rev. Daniel Leach, Supt.

PAMPHLETS.

November Circular of Information of National Bureau of Education. John Eaton, Jr., Commissioner.

Methods of Moral Instruction in Common Schools. By Rev. A. D. Mayo.

The System of Normal Training Schools best adapted to the Wants of Our People. By Prof. Wm. F. Phelps.

CATALOGUES.

National Normal School, Lebanon, Ohio. A. Holbrook, Principal.

Rhode Island State Normal School, Providence. J. C. Greenough. Prin'l.

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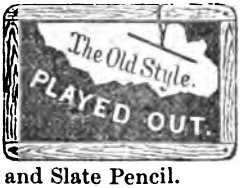

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LATE OHIO STATE SCHOOL COMMISSIONER.

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THE

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THE EDUCATIONAL SYSTEM OF BADEN.

The Grand Duchy of Baden was a distinct and independent state, until recently merged into the German empire, with one of the most liberal governments and intelligent and cultivated populations in Europe, and, for many years, was in strong sympathy with and readily imitative of much that is Prussian, yet with too much South German republicanism for harsh measures or despotic policy. It has an educational system as complete and comprehensive as is to be found, and, being just fresh from several trying educational conflicts, offers in school matters much that is particularly interesting and instructive. Premising further that common school education is coercive; that the population is two-thirds Catholic and one-third Protestant, both communions under state control, and hence the religious questions in the schools to be solved; and that the system embraces every grade and variety of schools, aiming to fit men for all the recognized callings of life, keeping ever uppermost the idea of reciprocal good to the individual and the state, I propose to set forth, in brief, the character and principles of the educational organization, the relations and functions of the various parts, and somewhat in detail their special means and methods, with their particular and general results.

Baden has an area of 6,000 square miles, a population of 1,000,000 Catholics and 500,000 Protestants, or an average population of 250 to the square mile, and a tax valuation of about $600,000,000, or $400 per head, and a tax assessment direct of

$3,600,000, or $2.40 to the person. Its school system embraces—

1. The University at Heidelberg, five hundred years old, with four distinct faculties, besides subsidiary schools, employing altogether about one hundred professors and teachers;

2. The University at Freiburg, four hundred years old, with four faculties and about sixty professors and teachers;

3. The Polytechnic Institute at Carlsruhe, one of the finest in Europe, with twelve departments and about fifty professors and assistants;

4. Astronomical Observatory and School at Mannheim;

5. School of Design, Fine Arts, and Antiquities at Carlsruhe;

6. Seven Lyceums, each with fifteen to twenty professors and teachers, doing about the same work as the average American college—though with more of the theoretical and less of the practical—and aiming chiefly to prepare boys for the University;

7. Five Gymnasiums, each with about ten professors and teachers, doing about the work of the average "scientific course", *including Latin*, in the American college, and aiming to prepare boys for the Polytechnic Institute;

8. Three Pedagogiums, each with six to eight professors and teachers, designed to give what may be called a "bureau-education", *i. e.*, prepare boys for public office or clerk work;

9. One Real Gymnasium with sixteen professors and teachers, looking to a thorough preparation for scientific public service and admission into the Polytechnic Institute;

10. Forty-eight Industrial schools (local), meant to afford a practical scientific basis for the better instruction of apprentices in their trades;

11. One Horticultural and Agricultural school with experimental farm and garden;

12. One Military Academy;

13. Three Normal Schools, each with eight to ten professors and teachers.

14. Thirty-two Public High Schools, corresponding well with the town or smaller city public high schools in America, except that the ancient languages are entirely replaced by modern, which latter are obligatory;

15. About two thousand Common Schools;

16. One Institute for the mute and one for the blind.

All the above institutions are wholly under public control and mostly supported by public funds. All except the common

schools and the mute and blind institutions are open to male pupils only, mixed schools of a higher grade than elementary or *volk schule* being unknown, while all girls' schools of higher grades are private, without state support, but subject to a measure of state supervision. Just here is the great defect of the Badish educational system—*it does not provide for the higher education of women;* and just here is also one of its most peculiar features—*it employs no female teachers*, even though these predominate and are successful in the private schools.

Historically, the universities are the oldest, having come down from the later middle ages. The gymnasium and lyceums arose next, or simultaneously, under patronage of the wealthier or higher classes; then the common schools, during the last century, mostly under ecclesiastical patronage; then normal schools, *viewed as a necessity of the common schools;* then, within a hundred years, as the world became more scientific, arose the scientific schools, and, within a half century, as men became more utilitarian and philanthropic, the various industrial and charitable schools have been established.

Private schools are numerous, and many of them of a high character. They are attended by girls, for whom the state does not provide, or by boys who are "irregulars" or pursuing some partial or special course,—as the state school curriculums are rigidly adhered to in the public schools. Private schools can be opened only with consent of and under the oversight of the authorities, while all teachers employed in them, must be licensed by the state.

Such is the composition of the Badish school system. Its organization and control may be briefly stated.

All school affairs belong to the Department of the Interior, which has charge, besides, of charitable institutions, hospitals, asylums, public health, police, orphanages and guardianships, the church, etc.

The universities, the polytechnicum, the astronomical observatory and school, the school of art and antiquities are under the direct general control of the Minister of the Interior and his cabinet of six "councilors", subject to the approval of the Executive, *i. e.*, the Grand Duke. The functions of this Ministerial Council, in controlling the institutions just named, are precisely those of an American university board of trustees or regents, with this difference, that, sitting daily, their oversight is more direct and their action more immediate; so that facul-

ties and professors have less, almost no general responsibilities, and may devote themselves wholly to their specialties.

The lyceums, gymnasiums, pedagogiums, industrial schools, horticultural and agricultural school*, the normal schools, public high schools and common schools, and schools for the blind and deaf are under the direct general control of a "superior school council", a subordinate division of the Department of the Interior. This council consists of a president and seven "ordinary" and six "extraordinary" members, employs a secretary and two assistants, four auditors, three recorders, one chief clerk and four assistants, and two ushers, and is furnished with buildings comprising thirty rooms, adapted and devoted to its business. These councilors hold their appointments directly from the Executive, and during competency and good conduct. The "ordinary" give their whole attention to the office, are paid by the state, and pensioned when too old to work. The "extraordinary" are all professors, holding prominent state positions, and are advisory but not working members of the council. Two of the councilors are jurists, one a physician, the others practical school men; the chief auditor is a financier and the chief recorder an archivist; *i. e.*, in the minute division of labor, professional as well as otherwise, obtaining in these old countries, the persons last mentioned have been thoroughly educated for and become skilled in their specialties, and are then put into this state educational board in view of their adaptation for the special as well as general duties of such a board. It is to be observed that this board or council determines all questions of school-house sites, repairs, buildings, as well as all sorts of provision for and management of schools, both internal and external. Hence the presumed need, in such a board, of medical, juridical, financial, registerial, as well as educational experience and ability. Further, to this same Department of the Interior, to which education belongs, belongs also the permanent boards of public health, architecture, and police with which the school board has always more or less to do. The police must be *theoretically* an important element in a compulsory system of common school education.

It need hardly be added, that, over and above their duties, in respect of these incidentals and externals of a school system, this "superior school council" has direct control of all matters

* Lately transferred to Heidelberg University.

of schooling proper, as text-books, courses of study, qualifications, examination, appointment and salaries of teachers, etc.

Of course, with an authority so centralized nothing more is to be asked for in the interest of harmony. With a distinct, central aim to meet, as far as possible, every educational want (from the German standpoint), nothing is lacking in unity. There would seem to be little wanting in completeness except provision for female teachers and girls' higher schools. All demands of permanence of policy and steadiness of action are fully met—perhaps more than met—in the prolonged tenure of office. Indeed, this last element may be in the way of healthful change, essential to growth and development; but the Germans have high ideals, are steady and devoted workers, and set much store by their official positions and still more by promotions and dignities that generally await real and useful merit.

On the actual, general working of the system, a little more may be said. The lyceums, gymnasiums, and pedagogiums were mostly in their origin communal or city endowed schools, and have special funds under special management; but are adopted by the state, embodied with needed changes into the state system, assisted more or less from state funds, and are under the immediate educational and disciplinary control of the state school council.

The public high schools are partly state and partly communal. They are confined to the larger towns and cities, which must provide grounds, buildings, and much of their running cost, while the state contributes to professors' salaries and controls courses of study, appointments of teachers, etc. These schools are under the immediate control of the superior school council.

The common schools, 2,000 in number, can not, in the nature of things, be under the *immediate* oversight and control of the state council. Hence the Grand Duchy is divided into eleven school districts, each of which has its district school councilor, an executive appointee, with state authority, with much the functions of a county superintendent. He has a *mediate* oversight of common schools, must make stated school visits, confer with local school authorities, look to the improvement of teachers, condition of school houses and schools, take cognizance of vacancies, look for supplies, and receive applications of teachers, and, determining all matters of minor importance (but subject to appeals by the local to the superior or state council),

report upon all these things to the state council. Further, every commune must have at least one common school, for which the commune must furnish building and grounds, all sites and plans for buildings, however, or extended repairs, needing to be submitted through the district councilor to the state council. All the common schools are "confessional"—either Catholic, Protestant, or Israelitish,—as elementary *intellectual and religious education are never dissociated.* This is attainable, because, in point of fact, all the smaller communes are wholly either Catholic or Protestant, while in the larger places there are generally enough of each confession for its own schools. This religious element in school organization explains the composition of the local councils. The "Local School Council" consists of the priest or pastor, the mayor*, and a teacher as ex-officio members, and three to five elective members, of whom one is chosen by the communal council and the others by the citizens. In the few mixed communes—Catholic and Protestant—the elective membership is equitably divided. This local school council has immediate oversight of local school affairs, subject to the limitations above named, and recognizes the district councilor as its immediate superior.

Such is the organization which has full control of these schools, with this exception, that the question of *religious instruction* is left to the teacher and the pastor or priest and his superiors up to the "superior church council", which is also a division of the State Department of the Interior.

Carlsruhe, January, 1873. WM. H. YOUNG.

GEOGRAPHY AND THE MUSES.

The writer has a rare old book, entitled, "A Rhyming Geography, or a Poetic Description of the United States of America, etc. By Victorianus Clark. Hartford: 1819." The rhymes are not always the best and the poetry is poor, but the work is nevertheless of great interest, as will be seen from the quotations which will be given. The rhymes were designed to be committed to memory by children, the author claiming that poetry was more easily remembered than prose.

* The whole population lives in villages and towns, there being no "country houses."

He first gives a general summary of the United States with the more distinguishing features of rivers, lakes, mountains, etc. Of the Ohio river, the author writes,—

"Boats throughout all the year may ride
To Pittsburgh on its azure tide;
And in the Spring when murmuring rills
Bear tribute from the snowy hills,
The stream is always very deep,
Affording vessels twenty feet."

Again,

"Lake Erie ever is described,
As dangerous on every side;
Here rocks project into the lake,
There floats the fatal water snake."

Of New England, the poet affirms that—

"The climate 's healthy through the year
From smiling spring to winter drear;
So speaks the plaintive village bell
Which mourns the dead with solemn knell."

Here the author alludes to the common practice of tolling the age by a distinct stroke of the bell for each year.

In education the palm is given to New England,—

"There 's no spot on this earthly ball
Where common people one and all,
Of male and female population,
Can boast of equal education."

The following lines are worthy of note—

"By talents and by worth alone,
Are candidates for office known,
And he who asks to be elected
Is very sure to be rejected."

The character of the people of Vermont is thus set forth—

"These mountaineers are hardy, rough,
Good nature and good sense enough;
Their bravery is proverbial,
Religion Congregational."

The following bit of natural history is given—

"Some men employed to sink a well
In Burlington, the curious tell,
Four fathoms deep, frogs torpid found,
Like stones imbedded in the ground;
The frogs rejoiced to see the day,
Began to leap about and play!
——Too quick transition to the light,
They died and sunk in second night."

In that day there were no railroads, and even canals were rare. But Massachusetts had the Middlesex canal, which is thus described,—

"The great canal call'd Middlesex,
Boston with Merrimac connects;
'Tis ten leagues long and eight yards wide,
And on its surface travelers ride,
Throughs swamps and rivers, rocks and ledges,
Floating on terraqueous sledges."

The author, living in Connecticut, "the land of steady habits", had a poor opinion of Rhode Island,—

"All Christians here support religion
By voluntary contribution;
For contracts have no binding force,
Made with the clergy, and of course
Reduced to very low condition
Are morals, virtue, and religion.
West of the Bay 's a moral waste
Unknown t' improvement, science, taste;
The people there are dissolute,
Of every privilege destitute;" etc., etc.

But let us turn to the West, and see what the poet says of Ohio and other Western States. Of the then chief towns of Ohio, we read—

"The town of Marietta stands
Upon Ohio's western strand;
This village is becoming wealthy,
And is accounted very healthy;
But Galliopolis, a town
First peopled from old France, and found
Upon a bend of this great river,
Has suffered from the yellow fever.*
The town of Chillicothe stands
Begirt with fine luxuriant lands,
Upon the banks of the Scioto,
One hundred miles from the Ohio.
* * * * * *
Athens as yet of puerile size
Up the fine stream Hockhocking lies;
The only college in this state,
(By law establish'd but of late,)
In this delightful village stands
Endowed with many fertile lands.
* * * * * *
Fine springs every where abound
Good mill-seats are rarely found.
Bears and deer are often seen,
Fish abound in every stream;
The woodlands boast the sugar-tree,
The chestnut, oak, and hiccory,
And other kinds a double score,
With the majestic sycamore;
Near Marietta, one of these
Ancient Titan-planted trees,
By actual measurement was found
To be just sixty feet around.
* * * * * *
Iron is on Hockhocking found,
Coal mines in various parts abound."

* Generated by the uncommon filthiness of the place.

In Indiana the chief towns are given as follows —

"Vincennes now the largest town
Is fifty leagues up Wabash found;
Tho' seat of government, this place
Is peopled by a mongrel race,
Of French extraction mean and base.
The other towns are Washington,
Wabash, Greenville, and Harrison."

The minerals of this state are thus enumerated—

"Salt springs are on the Wabash found
And coal beds in this state abound;
It has a silver mine, but sore
Laments the want of iron ore."

We commend the sore lamentation of the people of Indiana to the earnest attention of the present State Geologist!

The muse of geography thus sings of Illinois—

"The first town is Kaskaskia;
The second is Kahokia.
Kaskaskia on Kaskaskia stands
Twelve miles from Mississippi's strand.
Kahokia, the second town,
Upon Kahokia creek is found.
Goshen (the third town) rising fair
Graces the county of St. Clair."

Under the head of the "Religion and Manners" of Kentucky, we find the following poetic strains—

"Kentucky's laws make no provision
For the supporting of religion;
And as it had its population,
From almost every foreign nation,
Of manners we can only tell
That each man 's his own parallel.
Like the wild Arabs without home
The poorer sort the forest roam;
Sometimes a little hut they build,
Sometimes a little land they till;
But chiefly upon game depend,
From the wide wood and mountain den,
And when the 've eaten up the range
This for a thicker wild they change."

The Connecticut poet appears to have had little reverence for old Virginia—

"Whole counties here no house afford,
No altar sacred to the Lord;
For this state's laws make no provision
For the supporting of religion.

Here are two classes, and no more,
The very rich and very poor,
On their plantations separate
The planters live in princely state.
Tho' here the base concomitants
Of slavery, pride and indolence,
Have tainted and depraved their morals

And op'd the sluices to all evils;
Yet men of worth are sometimes found
And men of genius here abound:
To wit, the patriot Washington,
With Jefferson and Madison,
Our worthy President Monroe,
And others but a grade below."

In 1819 the Indian tribes had not been driven out of Georgia, and the author thus describes the "savages"—

"The western section of the state,
Where soil is of the choicest rate,
Is still claim'd by those savages,
Now called the Creeks or Muskogees.
They are brave, hardy, politic,
Learn writing and arithmetic;
An agricultural life they lead,
Train up the bullock and the steed;
They guide the plough and milk the kine,
They shear the sheep and prune the vine;
Skill'd in mechanic art are some,
Who ply the anvil, wheel, and loom."

The character of the *white* people of Georgia is not so favorably drawn—

"Drinking and gaming, sloth and pride,
Here pain the eyes on every side;
And every virtue hence has flown,
Save hospitality alone."

In a note the author thinks there are exceptions to this "general description."

The colleges of South Carolina are thus described—

"Three colleges from ancient date,
Have been established in this state;
But these are all unknown to fame
And all unworthy of the name;
For tho' they boast their college rules
They are in fact but grammar schools."

It appears that the buffalo was to be found in this state in 1819—

"Here range bears, deer, the buffaloe,
The catamount and panther too."

In describing New Orleans, the poetic muse fairly broke down, and the author gives us the following interesting prose:

"The fashionable part of the town is divided into two parties, who have each their respective ball rooms. Into that of the *whites*, none are admitted who are known to be tainted with negro blood. Into that of the *yellows*, none can enter who have not some white blood in their veins. The white gentlemen are here admitted freely, and they generally prefer it to the other. It is always superior to the other in the elegance of its decorations, and the splendor and dress of the company. There are here two French theatres. They are open three times a week, but the fullest and most brilliant audience is on *Sunday* evening. Billiards are the general amusement on Sunday morning and afternoon;

the stroke of the cue and the mace then resounding from one end of the city to the other. In a word, New Orleans, in the licentiousness of its morals, rivals the corruption of the old world."

St. Louis was then a mere village in the great Louisiana territory. At that time New York city contained 94,000 inhabitants, less than Cleveland now contains. Cincinnati had the rank of a town of the eighth class, and contained 2,500 people. Marietta and Chillicothe were then towns of the tenth class, and had each a population of 1,500 persons. Cleveland, Columbus, Toledo, and Dayton are not mentioned at all. The three leading towns in Illinois, Kaskaskia, Kahokia, and Goshen, present to day a sad contrast with Chicago, Springfield, Peoria, Bloomington, etc.

The author of this quaint old geography, while not a poet, as we have seen, was a rare man. The writer of this notice, when a boy, knew him as he contentedly followed the vocation of a stage driver between a small town in Litchfield county, Connecticut, and Hartford. He was full of life, and everybody liked to ride with him and hear him talk, for he was not only a delightful story-teller, but had a rare fund of wisdom on almost all topics. He was a deacon in the church of the village where he lived, was superintendent of the Sabbath school (and a most instructive and entertaining superintendent he was), and he often represented his town in the General Assembly or Legislature of Connecticut. It should be stated that his was not an ordinary stage-coach with an isolated driver's seat, but rather an open hack, so that the conversation was free and unreserved, and he was ever ready with wisdom and wit to enter the lists with lawyers, judges, divines,—men of high degree or low degree,—and so a ride with Deacon Clark was a memorable thing. His town never had a more intelligent and conscientious representative in the General Assembly.

He had a remarkable memory, and the presumption is, that he had the rhymes of his geography by heart. In his vocation, he was employed to do errands and transact no small amount of business which, in these days, belongs to express companies. He always trusted to his memory, but he had odd ways of assisting it. Once the writer, when a boy, wanted him to buy in Hartford, "Anthon's Lempriere's Classical Dictionary." He at once exclaimed, "Anthem's lamper-eels' Classical Dictionary; I shall certainly remember it!" He brought the book on his return.

E. B. A.

HADLEY'S LESSONS IN LANGUAGE.*

It is a hopeful omen that educators are beginning to percive a distinction between the theory of grammar and the art of grammar. It is still more hopeful that attempts are being made to teach the art of grammar separate from the theory. The issue, therefore, of a text-book to aid in teaching the art of grammar, or language culture, is hailed with no little delight.

The object of Hadley's Lessons is not only praiseworthy, but the book is a long stride in advance of anything else on the subject in the catalogues of our text-books. In fact, it is unique, and stands altogether alone—the only thing of the kind, in one of the most important and fundamental departments of school and family instruction. As such, it is worthy of all praise. It is hardly possible to estimate its significance and importance too highly.

The book is also highly meritorious in perceiving that language culture is largely primary work, and needs to begin with the pupil at an early age—that the study of the art of grammar precedes that of its theory. The author hence calls his book, "An Introduction to the Study of English Grammar", and declares that his aim has been to adapt it to the capacities of children.

These steps are real progress, in the right direction. They mark an era in the development of modern education—from and beyond which progress must not only be more rapid, but also more desirable, because in the main starting from the right point and going in the right direction. Hence, the joy with which this work is greeted. Mr. Hadley has both the genius to perceive a new and true path and the enterprise to be the first to walk in it.

And yet, as might be expected from a first effort, it has serious defects. It can be received only as a first and pioneer movement, to be speedily followed and superseded by something better than itself.

In the first place, it fails fully to grasp the true idea and place of language lessons. He perceives that they are introductory work, but does not see how early they need to be introduced. His first chapters begin at altogether too advanced

* HADLEY'S LESSONS IN LANGUAGE. An Introduction to the Study of English Grammar. Designed for Children. Chicago: Hadley Brothers.

a stage. A long series of lessons is needed before his begin. His first lesson tries, though unsuccessfully, to grapple with the idea of a sentence, and then at once flies off in a tangent after capital letters—both subjects that belong much nearer the end than the beginning of a series of language lessons.

In the next place, the work lacks method and gradation. Many of its after-lessons are really more elementary than the first ones. The first lesson on objects, expressive of the substantive idea, is the *thirty-third*, the previous ones having been taken up with the sentence, capitals, punctuation, and even rhetorical figures, such as apostrophe and personification. This is method and gradation with a vengeance. It reminds one of the Latin student, who when asked the *ordo* of a Latin sentence, answered, "Perfect disorder!" A more complete jumble and disorder of topics, it would hardly be practicable to conceive.

Again, a picture-lesson is introduced as the *fiftieth* lesson, whereas it should be nearly or quite the first. The eye is one of the first of the senses to be appealed to, and at first perhaps the most serviceable and effective of them all. Any series of language lessons that waits till the fiftieth number before directly appealing to it, is sadly neglectful of the proper means and elements of culture. There is an almost total failure, either to begin at the right place, or to proceed in natural and progressive steps.

Another defect is the lack of adaptation. Some of the matter is adapted to mere children, as it should be; while much of it is adapted only to advanced pupils. Illustrations of this have already been given. No single book should, or can successfully, comprise so much. It is neither a primary book, nor an advanced one. It is partly both, and hence is truly neither. The introduction of so many advanced topics necessitates the omission of a large portion of the matter that ought to be in a primary work. It is doubtful if the author even perceived what is best and necessary in primary drill in language. He has glimpses of it, but glimpses only. He sees the road, but he has never explored it. His book points us to the way, but somebody else must map it out for eager little feet to tread.

For such reasons as these, while the work has been joyfully greeted by advanced teachers, and will considerably aid them in their work, it will hardly come into very general use.

Those teachers who are not already trained so as scarcely to need it, will not be able to make it a practical, permanent success in their classes.

Any adequate language-drill must begin with the mere child, before wrong conceptions and bad habits of speech are formed — at least before these harden into inveterate habits. There may be still earlier steps, but it must certainly go back so far as to show the distinction between things and their representatives. The first representative is naturally a picture, as in the word method. Then the proper word-representation may follow. Thus, a picture of a cat may first be given, with the necessary illustration that it is not a cat, but simply represents one. Then the word "cat" is given, with a similar illustration, that will then readily be grasped.

In these steps, all that the children perceive—and they must perceive, and not the teacher for them — they must be led to express in simple, but complete, non-eliptical sentences. Elipsis, contraction, is essentially an advanced operation, expressive of culture and strength, and not of primary ignorance and weakness. If they perceive points not specifically in the lesson—as they usually will, more or less—it is not best to repress them, but only pleasantly and unperceived by them to lead them back again to the point in hand.

Next, naturally follows the illustration of the substantive idea — though that term should not be given to the children — through the names of objects. Ask for the names of things. See how many the children can give, and who can give the most, and gradually bring them to understand that everything has a name, and that every name denotes a corresponding thing, or object.

Here there may be a question whether qualities or actions follow next. It seems to me that the child-mind is most likely to notice actions first and most, rather than qualities. The boy notices what his dog *does*, and it is a question whether he does not derive his ideas of quality *through* action. His dog is "good", because he *plays*, or *drives* the chickens from the door. As before, actions must be named and catalogued indefinitely, and fully and correctly expressed.

From the first, the perceptions of the children must be called constantly into play in criticisms upon one another. Each one may be called upon to express the same thing, and the judgment of all exercised in determining whose

expression is best. The teacher, meanwhile, must guide everything, but with an unseen hand, telling little directly, but not failing to see that in the end the right expression is brought out, and that the children all clearly see that it is the right and best expression.

And these lessons should not be hurried over. Each individual one should be brief—never long or tiresome. But the point needs to be drilled upon, in varied and varying methods and lessons, until it is fully mastered. Haste is to be made slowly. If several terms be required to give a proper perception and expression of object and action, time is not lost. When you have secured so much, you have secured two most important and fundamental things: 1. A knowledge of subject and predicate,—though perhaps without their names,—which is the true basis and root of all grammar and analysis; and, 2. A knowledge how to use subject and predicate correctly in speech. The latter has been the direct object, and will be gained as it never is under the old method, while the former has also been secured.

Following the right use of the subject and predicate, or objects and actions, come qualities, or the adjective and adverbial ideas; for they are really but two varieties of one leading idea, that of the quality of an object or of an action. Here the road expands into a broad field, with so many avenues or foot-walks, that it can not now be followed. With the farther idea of the connective, these points include all there is in language, and so of language-culture, except perhaps words of euphony; for it will be found that all interjections that are more than mere euphony, are contracted sentences or substitutes for them.

I have thus briefly and imperfectly suggested a starting-point and some subsequent steps, for the construction of the most needed of all text-books at the present time—a systematic and thoroughly graded text-book in language lessons, taking the child from the nursery, and, before he is through with his primary training, or enters upon the theory of grammar, carrying him to a fluent and accurate use of speech, such as is never attained by the methods now in vogue.

Drill in language must indeed be continued through *all* our educational curriculum. But the great need is for a fitting text-book on the subject for our lowest primary work—though I do not know but I ought to call it our *highest* work.

Kenesaw, Neb. A. D. Williams.

DRAWING IN COMMON SCHOOLS.

The reasons for teaching drawing in our common schools are many and various, but they may be grouped into three classes.

1st. Drawing is a means of training the pupils to habits of accurate observation, and tends directly to secure manual skill. Since the object of the elementary instruction of our common schools is to secure the mental development of the pupils and to enable them to use the powers with which they are endowed, rather than to fit them for any specific trade or employment, the reason now stated is the most valid that can be urged for adding drawing to the list of studies authorized in our common schools. Singing has proved a valuable means of training the ear and the voice of children. The training of the eye to observe accurately, and of the hand to execute with precision, has been too much neglected. In fact, the American people have fallen behind some of the nations of Europe, in the use of educational appliances adapted to develop the perceptive faculties. Drawing, if properly taught, must ever prove a most effective means of enabling pupils to use the eye and the hand.

2d. Drawing is an aid to the pupil in the acquisition of the common English branches. Whenever a new branch is added to the course of study, there are always found those who have much to say about crowding more work into our common schools, and overtasking the pupils. Pupils may be overtasked if but one study is authorized, and any one of the several studies authorized may receive so much of the time and attention of the pupils, that it shall lead to the neglect of other studies equally important. Doubtless many men, now in active life, will find an illustration in point by recalling how much time and effort were formerly bestowed upon arithmetic in many schools, and how little attention was given to the acquisition and proper use of the English language. So far as drawing is an aid to the acquisition of those branches which are of acknowledged importance, it should certainly find a place in our schools. By the general adoption of map-drawing, it is already admitted that drawing is serviceable in the acquisition of one of the common English branches. Wherever it has been fairly tried, drawing, has been found an aid to primary pupils in learning the elements of reading and arithmetical notation. Drawing is also a preparation for the skillful use of the pen. We are told that twenty years ago, when drawing had fewer

enthusiastic advocates than at present, a convention of schoolmasters in London, who had made instruction in drawing general in their schools for a year, as an experiment, passed this resolution:

"That half of the time previously given to writing had been given to drawing, with the result that the writing had been better, and the power of drawing was a 'clear gain.'"

3d. Drawing will prepare the pupils for those employments in which drawings are made or used. The house builder, the machinist, and other artisans, are often obliged to work from drawings, hence the evident advantage of their having such a knowledge of drawing as to be able to read a drawing readily and accurately. Those who furnish the plans of buildings, those who contrive the decorations of our structures, and other artists who present to the eye that which shall supply our needs or gratify our tastes, must have a knowledge of drawing.

Much has been said in favor of teaching drawing because of its relation to certain industrial pursuits. The fact that it is a direct preparation for certain employments, is the weakest of the arguments we have considered in favor of teaching drawing in our common schools. The industrial value of drawing is very great, but that is not the main reason, and should never be urged as such for making it one of the branches of instruction authorized by law in every public school of the state. If it is admitted that drawing is to be taught in our common schools, because certain trades or arts can not be successfully carried on without it, then it must be at the same time admitted that the object of our common schools is to fit pupils for certain specific employments, and, instead of being schools for the development of the pupils' powers in that order and in that harmony that will be the best general preparation for a successful life, in whatever vocation the pupils may engage, our schools are polytechnic schools in which pupils enter at once upon a sort of apprenticeship to certain trades or arts. But the common schools of this state, or of any sister state, never have been, never should be, and never will be polytechnic institutions. Our common schools are for the education of all the children in the state. We do not ask the parent to decide their future employments, and then adopt studies accordingly. In these schools, we furnish elementary instruction, and endeavor to have each pupil, as his age, capacity, and time will admit,

secure that general education which will best prepare him for the duties of life, whether he be artist, or artisan, or neither. To develop the real manhood of the pupil, and to furnish him with the means and the motives of developing it, is the work of the common school. Drawing is a means to this end. It is an essential means of development during that period of life in which most children attend the common school.

Mathematical studies are no more essential to the development of the reasoning faculties than is drawing to the development of the perceptive faculties. Arithmetic should not be made an end in itself, nor should it be regarded merely as a preparation for the counting-room. Drawing should not be made an end in itself, nor should it be regarded merely as a means of preparation for the shop or studio. Both have their chief value in our common schools, as means of elementary education, and each, in its place and proper proportion, is equally important.

J. C. GREENOUGH.

State Normal School, Providence, R. I.

"IS OWING TO."

Some time ago I received the following brief letter from a gentleman in Iowa:

IOWA INSTITUTION FOR THE DEAF AND DUMB,
COUNCIL BLUFFS, Iowa, Nov. 6, 1872.

W. D. HENKLE—*Dear Sir:* Is not the use of "is owing to" (*National Teacher* for Sept. '72, p. 344, l. 24) for "is according to," or "it depends on," a gross provincialism? Yours truly, BENJ. TALBOT.

I was too busy when this letter was received to answer it immediately. On finding time a few weeks afterwards to reply, I referred to the NATIONAL TEACHER, and the OHIO EDUCATIONAL MONTHLY, and discovered that I was the offender. The passage is from the phonographic report of a discussion at the Ohio Teachers' Association, at Put-In Bay, last July—

"OGDEN: Then I want to appeal to this body of teachers, whether it is not pleasant to work? How is it, Brother Henkle?

"HENKLE: It is owing to what the work is."

Before making the reference I had concluded to defend the expression; but, after discovering my relation to it, the conclusion was strengthened. It is natural to defend our own acts. I replied accordingly. But, on reconsidering the matter, I

thought it would be a matter of general interest to teachers to know the nature of my defense. I have, therefore, to thank Mr. Talbot for the occasion he has given me to discuss an interesting point in language.

Since the receipt of the letter, I have, in my reading, observed the following instances of the phrase —

"A comparison of the analogous forms in cognate languages is calculated to throw light both on their relation to each other, and on the causes *to* which their affinity *is owing:* as the sculpture of the Greeks may be illustrated by comparing it with their poetry, and their poetry, by comparing it with their sculpture."—*Sir Geo. Cornewall Lewis's Romance Languages*, London, 1862, p. 39.

"Whether this *is owing to* the influence of the sea-coast in the formation of language, (according to the opinion of some philologists), or to the comparative exemption enjoyed by those countries from the inroads and dominion of the Teutonic races, (particularly in the case of Venice,) I shall not pretend to determine: certain, however, it is, that the dialects of these districts, though widely differing both from the written Italian and from one another, have not the chief part of the consonant terminations which distinguish all the other dialects of Northern Italy." —*Ib.*, p. 98.

"His famous essay, 'On the Vedas,' appeared in the 'Asiatic Researches" for 1805, (vol. viii), and, *owing to* his very extensive library of manuscripts, and that rare command of the language which he possessed, and which enabled him to make a more or less thorough examination of nearly all of them, it presented such a general view of the whole body of Vedic literature as has not even yet been surpassed."—*Whitney's Oriental and Linguistic Studies*, 1873, p. 1.

In the first quotation, "the cause *to* which their affinity *is owing*," means "the cause *on* which their affinity *depends*;" in the second, "whether this *is owing to* the influence of the sea-coast", means "whether this *depends on* the influence of the sea-coast"; and, in the third, "*owing to*" means "because of" or "on account of."

"But, if it *be owing* in part *to* nature, it *is owing to* education and culture still more.—*Blair's Rhetoric*, 3 vols., 8th ed., London, 1801, p. 21, vol. 1.

"To those who have read his works, it is scarcely necessary for me to add the name of Degerando; an author between whose general views and my own, I have been peculiarly flattered to remark a striking coincidence; and whose dissent from some of the conclusions which I have endeavored to establish, I would willingly believe, *is owing* more *to* the imperfect statement I have yet given of my opinions, than to the unsoundness of the arguments which led me to adopt them."—*Dugald Stewart's Works*, 11 vols., Hamilton's ed., Edinburgh, 1865, vol. 5, p. 128.

"*Owing to* the great length of this tense—dĕ-dō-ka-mi—the terminations fell off without any compensatory lengthening of the connecting vowel being felt to be required, as it had been in the present of the protracted stem."—*Peile's Greek and Latin Etymology*, London, 1871, p. 178.

"Probably, however, they differed so much that the provincial differences now existing in England may *be owing to* original differences of dialect in these tribes.—*Fowler's English Eng. Language*, New York, 1872, p. 83.

It will be readily seen that in these examples *owing to* is used in senses that Mr. Talbot seems to consider as *provincial.*

The following is what Dr. Johnson says in his quarto dictionary, (see 8th ed., revised and enlarged, 1799), vol. 2—

"OWING, *part.*, [from *owe.* A practice has long prevailed among writers, to use *owing*, the active participle of *owe*, in a passive sense, for *owed* or *due.* Of this impropriety some writers were aware, and having no quick sense of the force of English words, have used *due*, in the sense of consequence or imputation, which by other writers is used only of *debt.* We say the money is *due* to me; they say, likwise, the effect is *due* to the cause.]"

He then gives three meanings: "1. Consequential; 2. Due as a debt; 3. Imputed to, as an agent."

Under the first he gives this quotation from Atterbury:—

"This was *owing to* an indifference to the pleasures of life, and an aversion to the pomp of it."

Under the second, the following from Dryden and Locke:—

"You are both too bold;
I'll teach you all what's *owing to* you."

"The debt, *owing* from one country to the other, can not be paid with real effects sent thither to that value."

In these examples he says "*due* is undoubtedly the proper word.

Under the third, the following from Locke and Swift:—

"If we estimate things, what in them *is owing to* nature, and what to labour, we shall find in most of them 99-100ths to be on the account of labor."

"The custom of particular impeachments was not to be limited any more than that of struggles between nobles and commons; the ruin of Greece was owing to the former, as th of Rome was to the latter."

In Latham's Johnson's Dictionaary no change is made except that "Due as a debt" is put first, and "Consequential", second, and the remarks in brackets are put last and erroneously ascribed to Todd.

The following is from Reed's Graham's English Synonyms, p. 165:—

"That is *owing* which is to be referred to an origin or source; that is *due* which ought to be paid as a debt. Justice is due to all men. It *was owing to* this difficulty that the plan did not succeed. In the first of these examples, justice is qualified as *due—i. e.*, to be paid as a natural right. In the second, the difficulty is mentioned as the origin or cause of the plan not succeeding.

"In such sentences as "The money is owing", "It was due to the ignorance of the scholars", &c., both words are, undoubtedly, misapplied.."

Soule's English Synonymes has, p. 286, "*Owing to.* Attributable to; ascribable to; traceable to."

The following from Walpole's Anecdotes of Painting, vol. 1, ch. 6, is given in Richardson's Dictionary, p. 1404:—

"I suppose the lightness which is remarked in the coins of Edward VI, *was owing to* the embezzlements of this person."

For further definitions corroborative of those above given, see the dictionaries of Ash, Webster, and Worcester.

I can now safely reply that my use of "*is owing to*" was *not* a gross provincialism.

Salem, Ohio, Jan. 7. 1873. W. D. HENKLE.

P. S.—After sending the above for publication, and before getting the proof, I received the following letter, which justice demands should be given entire:

COUNCIL BLUFFS, IOWA, Jan. 17, 1873.

W. D. HENKLE—*Dear Sir:* Yours of Nov. 25th came duly to hand. I have carefully pondered the examples you have cited from English literature, and can not satisfy my own mind that the sense of "*depends*" or "*depended*" *on* belongs to *is* or *was owing to*, in a single case. I do not see the sense which you give from Reed's Graham's Synonyms, p. 165; and I consider that against your use of *owing to*, rather than in favor of it.

I never heard the combination used in the sense you are defending, till I came to Ohio from New England; and never saw it so used in print (except in newspapers) till I found it in the report of your remarks at Columbus [Put-In Bay]. I therefore deem it a *provincialism*, if not a *gross* one; even at the risk of finding myself called a purist.

Yours truly, BENJ. TALBOT.

The most frequent use of *owing to* is *in consequence of*. The ideas of *dependence* and *consequence* are so closely related that it certainly seems like hair-splitting for Mr. Talbot to call *owing to* a *provincialism* when indicating *dependence*, but admissible when indicating *consequence*. Let the critical reader judge between us. I should say, however, that my letter did not contain all the examples given above, which might be considerably increased by examples observed since Jan. 7. W. D. H.

EVERY hour's communion which a young person holds with good books, every view of true greatness obtained, and every noble thought cherished, reappear in life's victories. Every search after truth leaves as its best and most enduring result an increased power of search.—EDITOR.

EDITORIAL DEPARTMENT.

—— We publish this month the first of a series of papers on the school system of Germany, to be prepared specially for this journal by Prof. W. H. Young, U. S. Consul at Carlsruhe for Baden and Alsace-Lorraine. Prof. Young has spent nearly four years in Germany, and, having made the schools of the country a special study, he is fully competent to judge of their merits. Too many Americans who attempt to enlighten their countrymen respecting German schools, actually know very little about them. They make a flying trip through the country, visiting the principal cities—the more noted educational centres,—making inquiries of interested school officials, whose statements are not likely to be much under the truth, and peeping into a few of the schools. This done, they make haste to give the world the benefit of their observations and opinions. Prof. Young has waited until he has a personal and thorough acquaintance with the system in its organization and practice, and his readers have the assurance that his statements are based on actual knowledge. His second paper will treat of the origin and early development of the common schools of Baden, much of the information having been tediously dug out of old German documents. He will next write from the *schoolroom*, keeping in mind the wants of American schools and teachers.

—— We do not often give the review of a text-book a place among the leading contributions to this journal, but Mr. Williams's paper on "Hadley's Lessons in Language" seems worthy of this position, inasmuch as it goes beyond the book to a discussion of the practical subject of which it treats. It is very important that the introduction of elementary instruction in language into American schools be made successful, and, to this end, teachers need all the light and assistance which wide experiment and discussion can afford. Our second copy of Mr. Hadley's little book is in the hands of some teacher, doing good service, and so we are unable to put the honest and well-intended criticisms of our contributor to the test of an examination. We venture, however, to ask whether it is not possible to make the *first* lessons in language too systematic. Whatever may be true of the order in which different classes of ideas come into the mind of the infant, the pupils even in our lowest primary schools have many times observed actions, qualities, relations, etc., and it can make no practical difference which class of exercises comes first. The essential thing is that children be trained to observe carefully and to express their ideas and thoughts fully and accurately. Practice is more important than method. The language drills of the nursery have no special order. The little child learns to talk *by talking*, and the ideas expressed are surprisingly varied. A systematic presentation in a teachers' manual of the first lessons sketched by Mr. Williams, would be very suggestive and helpful, but the oral language drills in primary classes should, we think, be free, numerous, and varied.

——Within a few months we have frequently seen the statement, sometimes in official reports, that the evils of absenteeism and illiteracy are increasing in this country. On whose authority is this statement made? Is it true? It may be true in New England where the foreign element of the population (largely Irish and French) is rapidly increasing, but it is certainly not true in the northern and western sections of the country, and we do not believe that it is now true in the southern. A comparison of the present school attendance in the central and western states with the attendance of 1860, or any previous year, will show an encouraging increase, notwithstanding the recent efforts to correct the error of reënrollments, which formerly made the reported yearly enrollment too great. The assertion that the people of this country are actually deserting the schools, is an ugly weapon in the hands of the enemies of public education. It is high time that it was disproved and corrected. We see no reason why the public school systems of the northern states should be loaded down with the ignorance of the country at large, and charged with the illiteracy imported from Europe. There is no fairness but much mischief in such a course.

——We are also sorry to see the continued appeal to ordinary school statistics to prove the failure of the voluntary system. We have often said—and we believe that the statement has never been denied by any intelligent statistician—that the difference between the number of youth of school age enumerated and the number of pupils enrolled in the schools does not indicate the number of youth who are growing up unschooled. It is not possible for any man to take this difference, and, by making "allowances" and "reasonable reductions", arrive at a safe estimate of the number of habitual absentees. The school officer who assumes to be able to do this, acts the charlatan. This sort of figuring should be left to the enemies of public schools. There is no state or country in the world in which three-fourths of the youth between the ages of five and twenty-one attend school in any one year. Indeed, if every child should attend school ten months in the year for eight years, say between the ages of six and fourteen, the school enrollment would be only about fifty per cent of the number of youth between five and twenty-one years of age. The great majority of the pupils in the graded schools of cities and towns do not attend school more than eight years. By attending school from nine to ten months each year, they obtain as good an education as they would in say twelve years if they attended but six months each year. An increase in the number of months schools are annually in session, diminishes, perhaps not proportionately, the number of years pupils attend—the school-going period. This fact, and the large number of youth that attend church and other private schools in cities, will explain the very great difference between the number of pupils enrolled in the public schools and the number of youth of legal school age. There are doubtless too many that never attend any school, public or private; but what is gained by parading alarming "estimates" that have no reliable statistics back of them?

—— In a review of what has been done in the past twelve years for the improvement of the physical well-being of the pupils in the Boston schools, Supt. Philbrick reports the following items of progress: The introduction of vocal culture, with breathing exercises and such other gymnastic training as is specially adapted for the development and strengthening of the muscles used in effective vocal utterance; a vigorous and efficient system of military drill for all the boys in the high schools; the excluding of children between four and five years of age from the primary schools; the limiting of the afternoon sessions of the schools to two hours; the improvement of school accommodations; an increase in the average size of school-rooms and a decrease in the average number of pupils to a room; and more pains to ventilate the rooms, without exposing pupils to cold draughts of air. As a result of these improvements, he says that he sees broader shoulders, straighter spines, and fresher faces in the schools than formerly, but he considers the improvements made only a *beginning* of what ought to be accomplished. "*We ought to aim not merely* TO AVOID INJURING *the health of pupils while carrying on their instruction in our schools, but* TO INCREASE *their physical health, strength, and beauty.*" Mr. Philbrick thinks that boys receive less physical injury from their schooling than girls, inasmuch as nature helps boys more, and they are less easily over stimulated by examinations. "I do not hesitate", he adds, "to tell any mother in Boston that, in the present state of things, the head of a class in school is not a very safe or desirable place for a girl to occupy." He urges that girls should no longer be seen "carrying home daily for study large bundles of class books."

—— A RECENT number of *Appleton's Journal* advocates the ingrafting of an industrial department on our present system of public education, or, if this be impracticable, that school instruction have such a practical and scientific direction as will render it "a preparatory discipline for industrial effort." It charges that the present schooling is filling the minds of the young with "unrest", "a host of discontents" and "impracticable ambitions", and is thus emptying the workshops and working industrial mischief generally. We find less fault with the change proposed than with the reasons assigned for it. Our schools ought, we think, to give increased attention to the physical sciences and drawing, and technical schools and schools of art should be *added* to our present system. There are increasing industrial demands for such instruction, but we have little patience with this stale English cant respecting the spoiling of labor by education and intelligence. What industrial desolation popular education in this country has caused! What a dearth of thrift and enterprise! What an absence of manufactures and railroads! What squalor and wretchedness in the homes of labor! But how is the proposed industrial element to correct this? Will the teaching of industrial drawing and designing prove an antidote to the disquieting effect of reading, arithmetic, and geography? Will a knowledge of chemistry and physics so elevate and sweeten honest toil that it will become the acme of youthful ambi-

tion? We fear that no "industrial bent" in education will prevent unrest in the workshops so long as the undeveloped resources of the country and its rapidly increasing population open so many "short-cuts" to dazzling fortunes.

——THERE is a tendency among American colleges to adopt elective courses of study. Most of these colleges are too slimly endowed and too feebly manned to provide thorough instruction for regular classes, and we fail to see the advantage in their trying to imitate "university" practice. The elective system necessitates the employment of a large corps of professors, and the attempt to carry it out with an ordinary college faculty, can but result in *over-worked instructors* and *poor instruction*. A college professor should have time to be a thorough and progressive student. Besides the elective system breaks up the unity of college classes and destroys that *esprit de corps* which leads to high attaiments. It may also be questioned whether nine out of ten of the matriculates of American colleges are capable of selecting the studies they most need to pursue. The truth is, that neither the value of a study nor the student's taste for it can be determined by him *a priori*. Both experience and economy agree that it is better for young students to pursue wisely arranged courses of study, than to be dipping into studies here and there without reference to proper order or harmony of culture. Two regular courses of study are enough to meet the needs of college students. The elective system is for the university proper, and not for the college; it is for men, not for boys.

THE COMPULSORY SYSTEM.

The last biennial report of Supt. Bateman, of Illinois, contains an able discussion of the right, necessity, and expediency of laws compelling parents to educate their children. The argument is substantially the one presented at the meeting of the National Educational Association in Boston, and, though somewhat weakened by over elaboration, is the strongest which we have read. Its nature and scope are very clearly indicated in the followiug recapitulation:

"I think it has been shown that the legislative department may properly intervene to prevent those who have the control of children, from compelling or permitting such children to grow up in ignorance; that such intervention is not an abuse of powers conferred, nor an unwarrantable assumption of powers not granted; that it is no improper invasion of personal liberty, nor of the authority and rights of parents, since it merely enforces the performance of parental duty, which can not be regarded as an infraction of rights; that it is not inconsistent with rational freedom of conscience; that it puts the right of the child to be educated, above the right of the parent to keep it in ignorance; that it protects the many, who do educate their children, against the counteracting influence of the few, who will not; that it shields the innocent from cruel wrong, since starving the mind is worse than abusing the body; that it is grounded upon the belief that to bring up children in ignorance, will-

fully and without cause, is a crime, and should be treated as such; that such conduct on the part of those having the control of children, being a fruitful source of criminality, should be under the ban of legal condemnation, and the restraint of legal punishment; that the allegations as to the incompatibility of such laws with the nature and spirit of our political system, are unfounded, as also are the apprehensions concerning the assumed harshness and severity of their enforcement; that the operation of such laws in many of the most enlightened states of Europe, is a vindication of their wisdom and beneficence, affording an example that may be safely followed; that there is no proof that the masses of our people are opposed to such legislation, but, on the contrary, that there is good reason to believe that general enlightenment on the subject, would result in a general approval of the measure; that the exclusively voluntary policy has been, and is, but partially successful, while the accelerated influx of foreigners renders the adoption of new measures of education, without delay, a grave political necessity; that the proposed legislative intervention is but an affirmance of the irrefutable truth, that if it is right to tax all for the education of all, then it is equally right to see that all are educated; that it is in the line of a general human right, and of a fundamental right of children, and is compulsory only as that right must be protected against any and all infringements; that it is required, to fully utilize the vast resources already devoted to public education, and to prevent enormous and increasing waste of money, property, and effort; and, finally, that it is demanded by the clearest principles of justice both to children and tax-payers—by the franchises conferred and implied in the bill of rights embodied in the constitution—by considerations of the highest political wisdom, and by the facts and exigencies that now exist in this state, and in every other state of the Union."

The weakest point in the discussion is, perhaps, the answer to the objection that laws compelling school attendance can not be enforced in this country. Mr. Bateman replies that if this great question were thoroughly canvassed before the people, and legislators chosen with reference to it, the enacted law would be the *will* of the people, "intrenched in their convictions, representing their moral sentiments, and challenging their respect and support", and it would be enforced.

Granting that such a triumphant canvass to secure the enactment of a compulsory law is feasible, that it is possible to cause the imperative necessity of universal education to "be thundered forth with vehement earnestness, pungent appeal, and fiery rhetoric from every 'stump' in the land", would this insure the enforcement of the law when enacted? Would not public sentiment need to be sustained by continued agitation? And how is this to be secured? The cause has neither offices to bestow nor contracts to let, and it has no organization or party behind it. Moreover, would not the very existence of a compulsory law lessen, if not kill, that public agitation which must create and sustain the necessary interest in its enforcement? Would it not transfer the responsibility of universal education from the people to the officers intrusted with the execution of the law? We fear that a compulsory system in this country must meet this practical difficulty. The law must depend on an active public interest for its enforcement, and, at the same time, a public reliance upon the law will decrease this interest. This has been true of temperance legislation, even though the evil to be removed is more palpable, and, for obvious reasons, it must be true in education.

The fact is, that compulsory laws will not be fashioned in the white heat of public discussion, nor can they rely upon an active public consciousness of impending peril for their enforcement. They will be enacted, as they have been in several states, in the absence of any great popular demand, much less clamor, for them, and they will necessarily meet with much public indifference, apathy, and prejudice. In considering the practical value of such laws, these facts should be duly considered. They can, at best, be but a partial remedy for the evil of absenteeism, and it is a question whether their moral influence, as an expression of public opinion, will not accomplish more than their compulsory provision. But this moral influence has two edges. While the law brands as a crime the failure to educate children, it also sets up a very low standard which will be accepted by many parents as the full measure of their duty; thus, while some children will be brought into the schools, the education of others will be cut short.

But inasmuch as three states, Michigan, Connecticut, and New Hampshire, have each enacted a compulsory law, we shall soon be able to appeal to actual experience on this question. The compulsory system is having a most favorable trial in each of these states. The increasing public interest in universal education in the country generally, due in part to the alarming educational condition of nearly half of the states in the Union, will constantly reinforce public sentiment in the states which have appealed to compulsion. If the system is not successful, under the pressure of existing circumstances, it is not likely to prove a very efficient remedy for the evil of non-attendance.

Mr. Bateman convincingly answers several of the common objections to the compulsory system, and the right of the state to use compulsion is irrefutably maintained. There is no questioning the logic of this statement, "If it is right to tax all for the education of all, then it is equally right to see that all are educated." Every friend of public education must, we think, concede that the state has plenary power to enforce school attendance. This is a necessary corollary of the right to maintain a public school system. But the right of a free state may exceed its ability, and hence its duty. It has the ability to establish public schools, and this is its duty; but it may not be able, and it may not be expedient, to compel universal attendance upon them.

We believe that "education is a natural and inalienable right of every child", and we hold it to be the bounden duty of the state to see that children are not deprived of this right. But *how?* This is the unsettled question, and we thank Mr. Bateman for his valuable contribution to its practical solution. While we have much less faith than he in the efficiency of general compulsory laws, we rejoice to see the imperative duty of universal education so earnestly and eloquently enforced. We hope that the discussion of this question may speedily result in the enactment of laws forbidding the employment of young children in factories and workshops, in the multiplication of "Homes" for the care and education of the indigent, neglected, and friendless, and reformatories for the wayward and vagrant, and in the adoption of such other measures and agencies as will secure to every American child needed preparation for the duties and responsibilities of life.

OTHER STATES AND COUNTRIES.

—— The trustees of the Peabody Educational Fund make no donations to colleges, academies, or other private, sectarian, or charity schools. The fund is exclusively used for the aid of free public schools, and the appropriations made to different districts have been but about one-fifth of the money actually expended for school purposes. The fund is wisely used to induce communities to establish free schools.

—— The Conservative and Catholic-Clerical parties in Holland have joined hands for bringing about a modification in the new school bill. The blow is aimed at the now-existing system of unsectarian education. ——Several young ladies have joined the male scholars at the higher public schools—something unknown heretofore. All reports speak well of the excellent working of these mixed establishments.

—— Matthew F. Maury, once Commander in the United States Navy and later Superintendent of the United States Naval Observatory at Washington, died on the 1st of February. His principal published works are "The Physical Geography of the Sea" and "Maury's Geographical Series."——Prof. Tyndall has sailed for Europe, without accepting any of the invitations to visit the West, much to the regret of thousands. No one of the English lecturers has achieved so great a success before the American people.

—— *The Methodist* states that a new education bill has been introduced in the Danish Chambers. It compels children to attend school until they have completed their fifteenth year, and the money obtained by fines upon neglectful parents, is to be distributed among poor families who shall have exhibited most zeal in the instruction of their children. On demand of six pupils over fifteen years of age, the commune must establish a school for higher instruction. The course of instruction is extended from six years and a half to seven years and a half.

—— A congress of teachers, consisting of two thousand persons, was recently in session at Linz, in upper Austria. The Governor of the province opened the congress with an address, in which he said that the Austro-Hungarian government continued to be animated by a progressive spirit in educational matters, and that it would never permit any retrogression. This declaration produced a very depressing effect upon the few members who belong to the clerical party. Resolutions were adopted declaring: 1. The teaching of religion according to creed is opposed to the fundamental principle of popular education. 2. Religious teaching should be developed as simply and spiritually as possible by the knowledge of the original source of existence by means of science and history. 3. The teachings of morality should proceed by example as well as by precept. 4. It being admitted that the teaching of religion and morality is irrespective of creed, the necessity for an ecclesiastical teacher of religion in national schools disappears. The speeches were equally liberal in tone, and the congress is regarded as an event of no small importance.—*Exchange.*

CONNECTICUT NORMAL SCHOOL.—In my recent vacation, meeting Mr. Secretary Northrop in the cars near Hartford, I accepted an invitation to attend the examination and commencement exercises of the State Normal School at New Britain. The morning was devoted to the examination of classes, which was conducted orally, save as the blackboard was used. My attention was specially directed to the bearing of the training received by the pupils on their future work as teachers. I was satisfied that the institution at New Britain is what it purports to be—a "normal" school—a place for the training of teachers. Judging from what I saw, I have no doubt that teachers are trained there. In these days of shams and counterfeits, it was refreshing to see the workings of a genuine normal school. I came away with the conviction that any young man or woman, however highly educated, could spend time there advantageously before entering upon the work of teaching. The main object seemed to be, not to educate in the ordinary sense, but to make the education already gained as available as possible for purposes of instruction. Professor Carleton, the principal, impressed me favorably, and so did his associates, gentlemen and ladies. The position of principal of a normal school is a difficult one. A man may be essentially a charlatan, and yet manage to make young people of scanty attainments think him a paragon. A man may be a really strong man, and yet have his idiosyncrasy so strongly developed that his pupils will, consciously or unconsciously, imitate him when they come to teach. Governor Jewell gave the diplomas, and some brief addresses were made by gentlemen present. It was pleasant to hear again the voice of Dr. Henry Barnard, who has done so much for popular education, especially in Connecticut and Rhode Island. Connecticut has been also favored in her governors, who have been warm friends of common schools—Buckingham, English, Hawley, Jewell. If Hon. Henry P. Haven should be the next governor, as is probable, Gov. Jewell will have a worthy successor. Mr. H. was at New Britain, and has been a warm friend of the normal school from the first.

Marietta College, Feb. 6, 1873. I. W. A.

PENNSYLVANIA.—The annual report of the School Department for the year 1871–72 is a large document of 372 pages. It contains the report of the State Superintendent, brief reports of county and borough superintendents and of the principals of the normal schools, numerous statistical tables, etc. Supt. Wickersham's report is quite brief, filling but twenty-eight pages. Its summary of statistics contains many items of interest. We select the following: Number of school districts in the state, 2,029; number of schools, 15,999 (graded, 4,998); number of teachers, 18,368; number of pupils registered, 834,313; average number in daily attendance, 536,221; average salaries of male teachers, $41.71—of female teachers, $34.60: total cost of tuition, $3,104,273; cost of schoolhouses, $2,864,113; cost of contingencies, $1,264,686; average length of school term, 6.4 months; amount expended for orphan schools, $513,931; total expenses of all kinds, $8,859,003; number of actual members of teachers' institutes, 11,625; total cost of teachers' institutes, $16,962—

paid by counties $12,150, by members $4,812; number of students in the normal schools, 2,453; number who graduated last year, 59; number of orphan schools, 37; and number of orphans in schools and homes, 3,527. The total cost of tuition for the six years from 1861 to 1866 inclusive was $12,745,062, and for the six years from 1867 to 1872 inclusive, $21,578,258 —an increase of $8,833,196, or nearly 70 per cent. The total cost of school buildings from 1861 to 1866 inclusive was only $2,891,124, and from 1867 to 1872 inclusive it was $14,725,820—an increase of over 400 per cent! Mr. Wickersham calls the past six years "the era of school-house building."

The state is divided into twelve normal districts, each of which may establish one normal school. Schools are in operation in six of these districts, and buildings are in process of erection for schools in four others. The state makes an appropriation of $15,000 to aid in the erection of buildings, and a small annual appropriation for the payment of tuition, but the schools are largely managed by local boards of trustees, and, too often, are made to subserve private and local interests. In accordance with an act of the last legislature, the state has now two representatives in each board of trustees, but this will not fully remedy the inherent weakness of the system.

A table compiled by the National Bureau of Education from the returns of the late census shows that in 1870 there were 131,728 persons in the state, over ten years of age, who could not read, and 222,356 who could not write, 95,553 being foreigners. Of those who could not write, only 11,538 were between ten and fifteen years of age, and 19,974, between fifteen and twenty-one. A comparison of the number of illiterates under twenty-one with those over that age shows the increasing success of the schools in reaching the entire population. It is estimated that there is not less than 75,000 children in the state growing up in virtual ignorance, though many obtain a little knowledge of reading and writing. It is urged that the correction of the evil calls for prompt legislative action. The new Governor recommends the enactment of a compulsory law.

Ohio.—At the annual meeting of the Michigan Teachers' Association, held in Jackson in December last, it was unanimously voted to accept the invitation of the Ohio Teachers' Association to meet with it in joint session at Put-in Bay the first week of July. At a meeting of the executive committee of the Ohio Association in January last, the 1st, 2d, and 3d days of July were selected as the time for the joint meeting, and, as soon as the committee has had due conference with the officers of the Michigan Association, an attractive programme of exercises will be announced. The occasion will be one of special interest, and we hope that the Ohio teachers will report a thousand strong to welcome as many, at least, of the teachers of Michigan.

Ohio at Vienna.—School Commissioner Harvey has made a vigorous effort to secure a creditable representation of the Ohio School System in the Vienna Exposition, and, we are happy to add, with a good degree of success. Cleveland has contributed (1) two large educational charts

(English and German), presenting a synopsis of the public schools and other educational institutions and appliances; (2) five large photographs of school buildings; (3) twelve volumes of examination papers—high schools four, grammar schools three, primary schools two, German-English classes three; and (4) two volumes of specimens of penmanship. Columbus has contributed (1) two synoptical charts (English and German) and (2) ten volumes of examination papers—map drawing, drawing, penmanship, music, spelling, arithmetic, geography, objects, history and composition, and English grammar—and one volume of examination papers of the high school. Toledo has contributed (1) a synoptical chart; (2) a large portfolio, containing full plans and photographic views of the Central School Building and a district school building, and large drawings by the pupils of the high school; (3) four volumes of drawings by the different grades of pupils; and (4) eight volumes of term examination papers, one for each of the four lower grades, two for the grammar schools, and two for the high school. Dayton has contributed (1) a synoptical chart (printed and framed); (2) six volumes of examination papers, presenting the work in the third to the eighth grades inclusive; and (3) one volume of German examination papers. Springfield has contributed (1) a synoptical chart; (2) four volumes of examination papers—primary, intermediate, grammar, and high school; and (3) one volume of drawings. Canton has contributed (1) a synoptical chart, and (2) six volumes of examination papers—in language and grammar, oral lessons and history, geography, arithmetic, mathematics, history and natural science, and Latin. Fremont has contributed three volumes of examination papers, and a volume of drawings. Cincinnati will, without doubt, make a creditable exhibition of her educational interests. An examination of the contributions now received by the School Department (those above specified), justifies the opinion that they will do credit to the cities making them and to the state. The School Commissioner has furnished a full general representation of the school system and other educational instrumentalities of the state, and a bound volume of the Ohio Educational Monthly will fill some otherwise unoccupied niche.——Messrs. Wilson, Hinkle & Co., Cincinnati, have forwarded to Washington, for the Vienna Exposition, a complete set of their educational publications, comprising one hundred volumes. They will be exhibited in a handsome walnut case, and, after the Exposition, will be donated to the Strasbourg Library.

Cincinnati.—The forty-third annual report of the public schools, for the year ending June 30, 1872, is a document of 336 pages, and is filled with abundant evidence of honest and thorough instruction and supervision, attended by increasing success. It seems to us to differ most from previous reports in the fullness and value of the special reports, including those of the librarian, the committees on examinations and night schools, the principals of the City Normal School, Woodward and Hughes High Schools, and the superintendents of writing, drawing, and music. Miss Lathrop reports that the average number of pupils belonging to the normal school, has increased in four years from twenty-five to seventy, the number of regular instructors from two to seven, the number of

classes from one to five, and the number of practice rooms from two to eight. She very properly pleads for better accommodations. Why does not Cincinnati recognize the importance and necessity of normal training by erecting a commodious building specially adapted to the wants of its excellent normal school? We heartily indorse Miss Lathrop's statement that no amount of legislation or supervision, be it never so wise or skillful, can make good schools without good teachers. "*The teacher makes or unmakes the school.*" President Waters discusses briefly several important topics relating to the general management of the system. In speaking of the lower schools, he wisely urges that "it is of the utmost importance that the *moral* as well as the intellectual training should be healthful, elevating, and sound." Supt. Hancock's report is a very full and interesting exhibit of the inside workings of the schools. We learn from it that the whole number of different pupils enrolled in the white schools—the colored schools have a separate organization—was 26,449, with an average daily attendance of 20,048, or 75.7 per cent of the enrollment—a very high per cent. Seventy-five per cent of the pupils enrolled were under twelve years of age, and less than nine per cent were above fourteen. According to the school census of 1871, the number of youth in the city between five and twenty-one years of age was 120,578, or more than 55 per cent of the entire population of the city, according to the U. S. census of 1870! Mr. Hancock remarks that the result of the school census of Cincinnati for several years "has surprised school-men everywhere outside of our city limits." Why not those within the city limits? He states that the last census shows that the number of youth between 5 and 21 years of age in Chicago was only 30 per cent of the whole population, in St. Louis about 31 per cent, and in Cleveland nearly 35 per cent. To correct the disparaging inference—legitimately drawn from her surprising school census—that Cincinnati has a much smaller portion of her youth of school age in the public schools than other leading cities, he gives the following facts based on the *United States* census returns: The average number of pupils in daily attendance upon the public schools in Chicago in 1870 was 9.4 per cent of the whole population; in St. Louis, 6 per cent; in Cleveland, 8.8 per cent; and in Cincinnati, 9.8 per cent. The topics most fully discussed in the report are school attendance, drawing, the education of deaf-mutes, and the examination of teachers. The report of the assistant superintendent, Mr. Wisnewski, is chiefly devoted to the German-English Department. The whole number of pupils studying German at the close of the school year, was 11,273. About 80 per cent of the pupils studying German in the high schools, are of American parentage; in the intermediate schools, about 40 per cent; and in the district schools, only 4 per cent. Several topics are ably discussed.

West Virginia.—We are indebted to Prof. W. H. Morton, principal of the Wheeling Female College, for the proceedings of an educational convention, held at Grafton, the present state capital, Jan. 31st and Feb. 1st, 1873, and called for the purpose of securing needed amendments of the school law. Some sixty of the leading educationists of the state were present, and the proceedings were earnest and harmonious. Resolutions

were passed recommending (1) that the local school levy should be made by the township or district board of education; (2) that one school commissioner should be elected in each sub-district, and that the several sub-district commissioners thus chosen, should constitute a township or district board of education, with authority to employ teachers and fix their salaries, levy taxes, and take the general management of the educational affairs of the district (a good plan); (3) that county superintendents should be continued, the same to be elected by the voters of the counties; (4) that a teachers' institute, continuing one month, under competent instructors, should be held annually in each senatorial district; (5) that it is important to establish at least one public high school in each county; (6) that no person should be employed to teach in any free school who does not hold a valid certificate; (7) that all efforts to divert the school fund to the support of other than properly organized free schools, should be prevented by law; (8) that the text-books should be determined in a careful manner and none but those prescribed by law should be used in the schools. The sixth resolution also recommends the adoption of three classes of certificates, to wit: professional or state certificates, granted by a state board of examiners, and valid in any part of the state and during the life of the holder, unless sooner revoked; institute certificates, granted by institute boards of instruction, and valid in the senatorial district in which they are issued; and county certificates, granted by county boards of examiners, composed of the county superintendent and two experienced teachers appointed by the county court or commissioners.

RICHMOND, VA.—The public schools of this city are already firmly established in the confidence of the citizens, and are cheerfully supported. They are well organized, with an intelligent and liberal board of school officers, an able and efficient superintendent, and a competent and progressive corps of teachers. Their progress, both in organization and instruction, has been surprisingly rapid, and it is the ambition of those intrusted with their management, to make them second to the schools of no city in the country. The system now comprises 95 schools—an increase of 13 schools since last year. They are divided into 62 primary schools—white 33, colored 29; 32 grammar schools—white 26, colored 6; one high school, and one normal school. They employ 107 teachers—12 principals and 95 assistant teachers; and enroll 4,510 pupils—white, 2,690; colored, 1,820. The average number of pupils in daily attendance is 3,976. The eighteen school buildings afford accommodations for 5,065 pupils—an increase of 680 sittings since last year. The estimated monthly expenditure for the support of the system is about $6,700, and the total expenditures for the year ending June 30th, 1873, will be about $63,000. In November last the city council made an appropriation in eight per cent bonds for building purposes, and it is proposed to erect a good high school building in a central location. The number of pupils now attending the Richmond Normal School, in charge of R. P. Manly, with two assistants, is 124. The course of study covers a period of three years. The above facts are condensed from in the *Richmond Dispatch.*

ATLANTA, GA.— In May, 1871, we accepted the invitation of many leading citizens of Atlanta, to deliver a public address on universal education. Legal provision had been made by the legislature, and also by the city council, for the establishment of a public school system, and a board of education had been organized; but there was not a public school in the city, and most of the thirty to forty private schools, attended by, perhaps, some 1,200 pupils, occupied unsuitable and poorly furnished rooms. In November, 1871, Mr. B. Mallon, of Savannah, entered upon the duties of the office of superintendent, and in January, 1872, the public schools were inaugurated with appropriate exercises. There now lies upon our table the "First Annual Report of the Board of Education, for the School Year ending August 31, 1872"— a handsome document of 68 pages. Opening it we learn that an appropriation of $75,000 was expended for sites, buildings, repairs, and furniture, and that the current expenses of the schools for the term (from January to July), amounting to over $23,000, were met by temporary loans, in anticipation of taxes to be collected. This fact indicates the spirit of the Board. Accommodations were provided for about 1,500 pupils, but the first two weeks closed with 2,261 applicants for admission. Additional rooms were rented and furnished as rapidly as possible, and the year closed with an enrollment of 2,842 pupils,—high schools, 295; grammar schools, 1,780; colored schools, 767. The average number of pupils belonging was 2,442, and the average number in daily attendance, 2,173. Three or four hundred children were denied admission from want of room, and the Board now asks for money to erect two more buildings. The number of teachers employed was 52. We rejoice in this auspicious opening of the public schools of Atlanta. Supt. Mallon's excellent report is an assurance that the good work is in competent hands, and will be pushed forward to a triumphant success.

MISSOURI.— We have received a few advanced sheets of the seventh annual report of the state superintendent of public schools, and hurriedly glean a few facts of general interest. The number of youth between five and twenty-one years of age in the state in 1872 was 673,493, of whom 36,969 were colored. The number of pupils enrolled in the public shools was 389,956, an increase of 59,886. The number of schoolhouses reported was 6,608; number of schools, 7,221; number of teachers, 8,862; average monthly wages of male teachers, $42.50 — of female teachers, $31.50; average length of time schools were in session, 100 days; amount paid to teachers, $1,320,957; for building and other expenses, $584,040. Supt. Monteith states that, notwithstanding adverse influences, including the partial failure of staple crops, and low prices, the schools have increased in number and efficiency. The present school law is very imperfect, but the diversity of views prevailing renders it impracticable, at present, to secure needed changes. There is much opposition in the state to local taxation for school purposes. The law requires a local tax sufficient to support a school for four months, and the directors may extend the term to six months, but the amount of tax levied, even by a vote of the people, can not exceed ten mills on the

dollar. This does not seem to be a very oppressive provision. The two state normal schools have accommodations for 1,200 students, and the superintendent earnestly recommends that the appropriation be sufficiently increased to permit their teaching force to be doubled. Both schools are in a prosperous condition.

—— The city of Zanesville, Ohio, has 2,679 youth between six and sixteen years of age. The number of pupils between these ages enrolled in the public schools the past year was 2,198, and about 400 pupils attended Catholic and other private schools, leaving only about 100 youth who did not attend school. The teachers made praiseworthy efforts to seek out indigent children, and many were provided with suitable clothing and books, and brought into the schools. The board expended $957 for this purpose the past year — a very wise expenditure. Tiffin, Ohio, has 1,475 youth between six and sixteen years of age, 918 of whom were enrolled in the public schools, and 547 attended Catholic and other private schools, leaving only 10 out of school. It is probable that a number of the pupils in the private schools were not between six and sixteen years of age. Supt. Furness states that so far as it can be ascertained, all the youth over sixteen years of age "have at some time studied the elements of knowledge", and "can read and write, and perform the ordinary operations on simple numbers." These facts indicate a near approach to universal education in these cities.

—— John H. Rolfe, for many years the well-known western agent of Harper & Brothers, New York, has established in Chicago a School Supply Agency for the introduction of dictionaries, gazetteers, outline maps, reference maps, atlases, library books, and other educational helps. Among the works of reference, found in his list, are Lippincott's Pronouncing Gazetteer of the World, Lippincott's Pronouncing Biographical Dictionary (a new work of great merit), and Webster's Illustrated Quarto Dictionary—three works which should be in every grammar school, high school, academy, and college in the country. With a view of promoting the introduction of these and other reference works into schools, Mr. Rolfe offers to supply them, for a limited period, on very favorable terms. For further information, see his inset in our January issue, or apply to him by letter, 117 State Street, Chicago, Ill.

CORRESPONDENCE AND QUERIES.

Two Questions.— Some children learn to spell well on paper, but can not do so well when spelling aloud. Others, on the contrary, can spell correctly aloud, but make constant mistakes in writing. Generally, this is owing to training, each one doing what he has been trained to do.

1. Is the difference owing to training alone? When children have been taught in precisely the same way all their school days, do some spell better one way and some the other?

2. If there is this natural difference in children, then is it accompanied by any other bodily or mental peculiarities? For instance, those who spell well by ear, (that is, aloud), have they a more acute sense of

hearing, or have they "an ear for music?" And those who spell well by eye, (that is, in writing), have they sharper eye-sight, or have they a taste for drawing, or do they show an aptness for geometry? Or, in any way, is excellence in one kind of spelling usually found in connection with any other peculiarity of mind or body?

If those readers of this page, who know some facts in answer to these questions, will send me a statement, I will try to digest the evidence for publication in this journal. Please state as nearly as you can how many cases you have noticed; how many show a natural difference how many of these show other peculiarities, and in what way.

Gambier, Ohio. ELI T. TAPPAN.

MR. EDITOR:— A teacher lately asked me if practice in spelling words by sound, in the grades above the lowest primary, did not "have a tendency to make poor spellers." My reply was, that geography or arithmetic would have the same tendency if taught to the exclusion of spelling by letter. The end of phonic spelling is a ready and accurate pronunciation; but, in securing this, we often assist the pupil in learning to spell correctly. Every written examination furnishes examples of words misspelled on account of an imperfect idea of their phonic elements. The following, selected from one set of papers, written by pupils from ten to twelve years old, will serve as an illustration: Indigitive, transity, Pertomac, Westconsin, Pitchburg, cabbige, tunnups, betatoes, husbent.

Would it not be well for county examiners to introduce an occasional question on the keeping of registers and the preparation of reports? If this were frequently done in all parts of the state, it would cause the candidates to prepare for this part of a teacher's duty. There are many who teach for months without seeing a blank report, and, at the end of the term, the minutest directions avail them but little, because they have not kept an intelligible register. SUPERINTENDENT.

MR. EDITOR:— Prominent among the educational wants of country districts are well-arranged school-houses, and I wish through you to suggest a remedy. Building committees in country and village districts are, so far as I know, without any intelligent guide in their duties, and hence I suggest that the state school department should issue, in some form, a work containing the best plans for school-houses, the same to be placed within reach of all boards of education. If not issued by the state department, the work should, at least, have its approval and commendation. It might be issued in the form of a journal, devoted exclusively to school architecture and the duties of school officers. There are many townships in the state in which the provisions of the law respecting the wages of teachers, are not understood. Can boards of education say what wages shall be paid teachers? Can not local directors continue the school twenty-four weeks in the year, paying such wages as they may deem best? Must not the township board make provision for paying the amount due? Can a sub-district be in debt for the wages of a teacher? Information on these and many other points would greatly assist local school directors and boards of education. K.

MR. EDITOR:— In reply to one of your querists, permit me to say that I should teach pupils to read "Sec. 1.", section *one;* Chapter "XII", chapter *twelve;* "Nov. 20", November *twenty.* I would read "Sec. 5th", section *fifth;* "May 6th", May *sixth.* In other words, I would read *accurately.* I prefer to say, rule *second*, number *thirty*, page *ninety.* W.

MR. EDITOR:— Some authors define a decimal fraction to be a fraction whose denominator is some power of ten "*unexpressed.*" If this be true, what kind of a fraction is *nine tenths*, or *thirty-five hundredths?* What kind of a fraction is .065 when *read* by teacher or pupil? Can not a decimal fraction be expressed in words, or orally? QUERIST.

BOOK NOTICES.

IN a favorable notice of Monroe's Fourth Reader (December number, 1872), we ventured to criticise the statement that the pronunciation of *u* (in *mule, tune*, etc.) is "identical with that of the pronoun *you*", asserting that the pronunciation of "you" begins with the sound of *y*, while the diphthong *u* does not. Our attention is called to the fact that Prof. Monroe is sustained by standard authorities, and the following quotations are cited:

"This [regular long *u*] is a compound sound formed of the vowel *oo* with a slight sound of the consonant *y* or of *ĕ* or *ĭ* before it."—*Webster's Dictionary*, last edition.

"Long *u*, marked *û*. Equivalent to the syllable *yoo*."—*Soule & Wheeler's Manual of English Pronunciation.*

"*U* at the beginning of words, when long, has the sound of *yu*." "In a pretty large class of words . . . . . the *u* may properly be regarded as having the slight sound of long *u;* and the sound may be noted by *yu*, slightly articulated."—*Worcester's Dictionary*, last edition.

"*Diphthongal u.* Long *u* (*ū, yoo*) is generally heard in syllables ending in *e*, as *mute*", etc.—*Sargent's Pronouncing Spelling Book.*

We admit that these citations, especially the second and fourth, prove that Prof. Monroe has good authority for his position, and we cheerfully *cancel our criticism.* But we do not change our opinion respecting the true sound of long *u.* Webster's Unabridged Dictionary, edition of 1856, describes it as "a peculiar vowel sound, nearly resembling *e* and *oo*, but so much closer as hardly to be diphthongal." "Some English writers allege", says Webster, "that the proper sound of *u* is *yu.* This is a great mistake; the true sound is nearly *eu*, but these letters do not express the exact sound." The latest edition, as cited above, is not certain whether the initial sound is the consonant *y* or *ĕ* or *ĭ.* Worcester (edition, 1859), states that English orthoëpists are not agreed respecting the sound of *u* in the class of words in which he notes the sound by "*yu*, slightly articulated"; and, when *u* is preceded by *r*, he gives it "the sound of *oo* in fool". So much for the authorities that, years ago, led us to form an opinion respecting the sound of long *u.* We have since carefully observed the pronunciation of the best American speakers, with a confirmation of the view that the sound of long *u* is not

"identical with the pronunciation of the pronoun *you* ", except when it begins a word or syllable. The difference may be observed by speaking the word *tune*, and then (omitting the *t*) *une*, and then *yune;* also, *mute, ute, yute.* If our ear is not at fault, the sound of *u* is short *i* and *oo* closely united, and we do not see how the vowel short *i* and the consonant *y* can be identical.

But whatever may be the true sound of long *u*, our criticism of Prof. Monroe's position was hasty and ill-considered. We supposed that the American authorities were clearly against him, or we should not have made such a rash venture. Hereafter we shall not presume thus to question his authority until we have carefully examined the ground.

FIRST LESSONS IN COMPOSITION. By JOHN S. HART, LL.D. Author of "Composition and Rhetoric", "In the School Room", "English Grammar", etc. Philadelphia: Eldredge & Brother.

PINNEO'S GUIDE TO COMPOSITION: A Series of Practical Lessons, designed to simplify the Art of Writing Composition. By T. S. PINNEO, M.A., M.D., Anthor of "Primary Grammar", "Analytical Grammar", etc. Cincinnati and New York: Wilson, Hinkle & Co.

Hart's "First Lessons in Composition" claims to be "a book of exercises", not a text-book; but the distinction does not seem to be important. As an introduction to the study of technical grammar, it is worth all the primary and elementary grammatical text-books that have ever been written. It not only puts composition before grammar, but it reaches grammatical principles *through* composition — the true idea. Part I treats of words. It contains a series of synthetic exercises designed to make the pupil familiar with the different classes of words, followed by exercises showing how words are formed and how changes of form affect their meaning. These exercises are introductory. Part II takes up sentence-making. It begins with the three simplest forms of the sentence, teaches their essential parts or elements, and then, by adding modifiers, builds up the simple sentence. The pupil obtains a clear idea of the nature and use of these modifiers, not by studying definitions or formal explanations, but by composing sentences containing them. These exercises are capital. They are followed by exercises illustrating the formation of compound and complex sentences. Part III shows how variety of expression is secured by changes in arrangement and by changes of structure, including the active and passive voices, participial constructions, etc. Part IV presents exercises in the use of the figures of speech, and the appendix treats of punctuation. The entire course may easily be mastered in the first two years now generally devoted to the study of technical grammar, and the first three parts may be compassed in one year.

"Pinneo's "Guide to Composition" is based on a somewhat different plan. It first aims to make the pupil familiar with the use of capitals and punctuation marks, by a series of numerous and varied exercises in sentence-making. Exercises in the use of words and phrases are next introduced, with "cautions" to guard the pupils against common errors. The formation of sentences, simple and compound, follows, with exercises illustrating variety of arrangement and expression. The next

forty pages are devoted to composition proper, including narration, description, letter-writing and essays. A brief, but excellent chapter on figurative language is followed by one on themes, and the book closes with an extensive list of "subjects" for composition.

The above outlines of these two works show that neither of them is adapted to the primary classes in our schools, though many of the exercises may properly be used in the lowest grades. Their true place as manuals in the hands of pupils is in the sub-grammar classes. They are both "thin" books, as they should be, and are neatly bound in muslin.

A MANUAL OF AMERICAN LITERATURE. Designed for the use of Schools of Advanced Grades. By N. K. ROYSE, Principal of Sixth District School, Cincinnati, O. Philadelphia: Cowperthwait & Co.

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——THE NATIONAL NORMAL is now published by Geo. E. Stevens & Co., Cincinnati, who, a few months since, purchased the book-selling and publishing business of J. Holbrook & Co., the former publishers. It continues, however, under the vigorous editorial management of Prof. R. H. Holbrook, of the National Normal School. The characteristic feature of the *Normal* is the large amount of space it devotes to educational afiairs in the different states. It is not an advocate of county teachers' institutes, state normal schools, or endowed colleges. If pluck and energy can make *The National Normal* a paying educational journal, its present conductors will succeed. Subscription price, $1.50 a year.

——THE NEW YORK STATE EDUCATIONAL JOURNAL, started in November as the organ of the State Teachers' Association, has one editor, and six corresponding editors, representing as many educational interests. This arrangement filled the first two numbers with long papers, and gave the *Journal* a somewhat "heavy" and unpromising start. The last two numbers, however, show better what Mr. Burchard can do when he takes hold of the work in earnest, as the one responsible editor. He has the ability to edit a first-class journal.

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LIPPINCOTT'S UNIVERSAL PRONOUNCING BIOGRAPHICAL DICTIONARY. By J. Thomas, A.M., M.D. Complete in one volume of 2,345 pages. Retail price, $15. Philadelphia: J. B. Lippincott & Co. John H. Rolfe, Chicago, Ill., Agent.

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THE EDUCATIONAL YEAR BOOK FOR 1873. Uniform with Volume for 1872. Price, $1.25. New York: Wm. Wood & Co.

SWINTON'S PROGRESSIVE ENGLISH GRAMMAR. By Prof. William Swinton, A.M. New York: Harper & Brothers.

THE ELOCUTIONIST'S ANNUAL. Number 1. By J. W. Shoemaker, A.M. Philadelphia: J. W. Daughaday & Co. 1873. Price, 25 cts.

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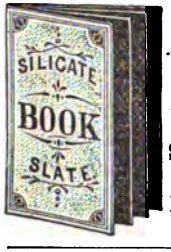

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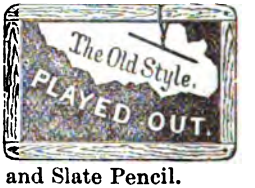

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THE COMMON-SCHOOL SYSTEM OF BADEN.

ITS ORIGIN AND EARLY DEVELOPMENT.

No clearer idea of the principles and peculiar usages of the German common or volks schools *in general* can be given, than is obtained in a brief review of the origin and development of the schools themselves. There is also enough that is common to and characteristic of them all, to justify the presenting of one section or district as a fair specimen, in the respect named, of the whole. But since Baden is made up of provinces, which, at the time of the origin and infancy of the common schools, were severally a portion of Austria, a Protestant margravate, a Catholic margravate, two Catholic bishoprics, and a Protestant princedom, and yet all German, it would be difficult to find another so small a district, which gives so just a notion of the beginning and building up of the German common schools.

The germs of these schools were every where religious and ecclesiastical; *i. e.*, they were started and kept up and largely taught by priests and pastors, under direction of their church superiors generally, but sometimes of their own movement, as an evangelizing means among the peasantry,—the chief and perhaps the only subject at first being the catechism, and all instruction being oral. About the same time singing (church music) instruction was associated with the catechetical; and the lessons being increased from weekly to daily, with reading added, but still with reference to learning the catechism. The

church sexton or beadle became successively the assistant, the associate, and, when competent, the "master" of the school. This took so much of his time as to make his compensation a question of practical import, which was met at first by church collections, then by assessments on the parents, and then by tuition fees, while the school was kept in town-halls, the sexton's house, church vestry, or even in shepherds' huts. So it was generally in the several districts comprised in the present Grand Duchy of Baden, up to about the middle of the last century; the school of each village or hamlet depending both for its character and efficiency on the local priest, pastor, or sexton. The larger towns had, of course, various schools of a higher grade. I speak herein only of the common or elementary *volks* schools.

About the middle of the eighteenth century, rescripts, orders or decrees began to issue from the several rulers, whether bishops, margraves, princes, or superiors, for the further establishment, improvement, and better control of the schools. In most of these little sovereignties the ecclesiastical and the civil authority were united, and when this was not the case, the church was still looked upon as the special patron of the schools, while the state only supplemented and supported the ecclesiastical authority. This is sufficiently explained by the origin of the schools and the history of the times, and in turn explains much of what follows. These general school rescripts or decrees met, as late as within a hundred years, bitter opposition from peasants, and caused repeated uproars among the people, which all the authority of the priest and power of the magistrate could scarcely quell;—the idea, said they, that *girls*, besides the catechism, should learn also *writing!* These popular prejudices and a want of school funds, buildings, and teachers proved so great hindrances, that the beginning of the present century—the era of school legislation—found almost no basis on which to build a general system of state elementary schools. A more particular reference to some of the before-mentioned measures may prove both interesting and instructive.

In 1754, in the Protestant margravate of Durlach-Baden, about one-fifth of the present duchy, the margrave decreed that all children between the ages of six and thirteen years should attend school, under direction of local pastors and magistrates. The only schools available were those above described, which were very irregularly kept open for a limited portion of each

year. In 1757 provisions were decreed for the preparation, examination, and licensing of teachers, and in 1758 for a teacher's seminary (normal school) in connection with the gymnasium at Carlsruhe. This old margrave, Carl Friedrich, had no notion of schools, even of the low grade of that day, without *trained teachers.* In 1765–8–9 Church Councilor and Court-Preacher Walz instituted measures providing, in certain better districts, for German schools (the elementary or *volks* schools were so called in distinction from the Latin schools of the time) where reading, writing, and arithmetic should be taught with sufficient religious instruction for *confirmation.* A part of the proper pastoral work was here directly transferred to the school, which was designed to "furnish the child with a fundamental training for his temporal and eternal welfare." Still, however, actual results depended on local intelligence, enterprise, and efficiency.

As to the support of teachers, a decree of 1749 placed $200 annually at the disposal of the church authorities for *pro rata* distribution in increase of teachers' salaries and improvement of schoolhouses. In 1754 this was increased to $800 yearly, and provision made that each pastor's salary below that sum should be increased to $33, and each teacher's salary to at least $28 per annum. In 1768 pastors and teachers were put upon the same footing as other citizens in respect to distribution of communal property, as wood, common crops, etc., and in 1770 teachers were entitled to board-money from the commune in commutation of "boarding around"—*wandering table* or round-eating as they called it.

In respect of other school expenses, it was decreed in 1754 that each commune should make an allowance of school firewood, instead of each child's bringing to school with him a bit of wood for the day's use; while in 1743 it had been ordered to take up a church-door collection twice a year for schoolhouse purposes, and in 1756 a decree required the setting aside 25 per cent of the income of all school foundations and the same per cent of all future school collections for schoolhouse purposes.

In the Catholic margravate of Baden–Baden (smaller share Baden–Durlach,) in 1760 it was decreed to set apart a portion of the wine tax for school purposes, and the next year came a decree that all children of between six and thirteen years should be sent to the schools for learning reading, writing, and arithmetic: higher school or private instruction could be substituted

only for important reasons and on joint permission of priests and magistrates: schools were to be kept open summer and winter; to be under immediate supervision of the pastors who were to make weekly visits; teachers were to be men, born in wedlock of christian parents, twenty years old, furnished with testimonials as to morals (including manners) and religion, and to be competent to teach reading, plain and ornamental writing, the five elementary rules (*species*) of arithmetic; must understand the choral, play the organ, and have attended several Latin schools—the latter perhaps to ensure some skill in teaching: applicants for teacherships must be examined not only by the civil but also by church authorities as to their fitness for catechism instruction and interpretation, while their licenses and appointments could issue only from the government itself on examination and commendation by the constituted local authorities: if the schoolmaster was a sacristan (sexton), and had as many as eighty pupils, he must employ an assistant, who was to be approved by priest and magistrate (Burgermeister). This was in a Catholic province more than a hundred years ago. These two margravates were united in 1771 with their school systems undisturbed except that the church control in the latter was slightly curtailed in the appointment and removal of teachers.

Much of South Baden was once Austrian. In Austria in 1774, a general school ordinance of Maria Theresa provided for the establishment, under control of Provincial School Committees, of three distinct classes of schools: 1. "Normal schools" at each provincial capital, to serve as "higher *real* and model schools", and for the education and training of skilled teachers. 2. "Head or chief schools" in each larger town, and at least one in each county. 3. Common (or "trivial") schools in all smaller towns, villages, and "trading marts", in which should be taught "Religion, Religious History, Christian morals, and Reading, Writing, and Arithmetic." These lower schools were under the immediate oversight of the local pastor with whom were associated the Burgermeister and a local judicial officer, all constituting the *ex officio* local school board. As sort of township directors suitable persons were to be appointed by the Provincial School Committee. These schools were to be supported by fees, but neither school attendance nor the establishment of schools was made compulsory; but in 1781 another edict was issued requiring parents of means to pay double fees on all

children out of school, and parents without means to work out their school fees on public works, especially on schoolhouse building. In 1785 it was decreed that not only in existing pastorates and "chaplaincies", but wherever ninety children were found within a circumference of three miles, a school should be established, for which, as a general rule, the provincial authorities, the commune, and the patrons, should pay severally one-third part; children of parents unable to pay should go free; for every ninety children of school age, there should be a schoolmaster, and for an excess of fifty children, an assistant; the master should be furnished a house and paid $52 with increase to $60 per year, as soon as means should accrue; while the assistant was to receive $28 with prospective increase to $32 yearly. Deficiencies from these salaries were to be made up from any school foundation or next from religious funds. In 1786 provision was made for county school visitors to be tested by examination in "pedagogy", "methods", etc., who were to inspect and report upon the maintenance, management, and teaching of the schools. About the same time a portion of the church revenues, a percentage of decedent's estates and a portion of the funds of discontinued "religious brotherhoods" were appropriated to school purposes, while religious processions were authorized to solicit contributions for "repairing and building schoolhouses, paying teachers, and buying books for the poor." All this was in Catholic Austria one hundred years ago.

In the Catholic bishopric of Speyer, a general ordinance of Prince-Bishop August in 1785 characterized "a good education and intelligent instruction of the youth of both sexes as the most important service a man could render the human race", and prescribed methods of school instruction and management and teachers' qualifications; made compulsory the school attendance of all children of seven to sixteen years; applied fines for non-compliance to school purposes; required schools to be kept open the year round in all places without exception, in which should be taught "Religion in connection with Bible History and Christian Morals, Reading, Plain and Ornamental Writing, German Language and Composition, the Five Fundamental Rules of Arithmetic and Single Rule of Three, Singing, and *Politeness*":—schools to be under immediate oversight of local pastors with a superior control by church beadles and judicial officers as school deputies, while annual visitations for in-

spection by district deans and the civil magistrates, "inasmuch as the final and substantial results of the ordinance must depend upon the efficiency of the civil arm." The duty of maintaining these schools was laid upon the communes themselves, though the Prince-Bishop contributed annually $200 in help of the poorer communes. Teachers salaries were to range from $40 to $60 per year, while they enjoyed certain local immunities and privileges.

The early history of common schools in the Rhine Palatinate (Catholic), Prince-Bishopric of Wurtzburg (Catholic), and Princedom Furstenburg, parts of which are now incorporated in Baden, presents similar facts.

In these brief sketches is found an account of several interesting and peculiar points in the German common-school systems. Their origin was ecclesiastical and their first aim religious, while the churches all along had much to do with their support and control. Compulsory establishment of and attendance upon schools had its motive rather in the duty of religious than in the advantage of secular instruction. Herein also is explained the practice of employing only *male* teachers, as well as the high qualifications required and high respect awarded them; viz., they were *church* officials, or intimately associated with them. The idea of temporal advantage to the individual and of reciprocal good between the individual and the state by general and public education, are of much later date. It was these later conceptions and the consequently increasing assumption by the state of educational control, that have precipitated the late church and state conflicts on school questions. Herein also is explained the universal practice, still prevailing, of authorized and direct religious instruction by pastors in the schools.

Since the beginning of the present century, at which time Baden was constituted of the dependencies, whole or in part, abovenamed, all common school ordinances and legislation have looked to the more harmonious and uniform working of a general system, and the better support and condition of the schools.

Carlsruhe, January, 1873. WM. H. YOUNG.

——Two things a man should never be angry at: what he *can* help and what he *can not* help.

INSTRUCTION IN COMPOSITION.

One of the most distinguished of American professors and authors told us that he never permitted a school teacher to instruct one of his children in composition, believing all methods with which he was acquainted, pernicious in the formation of a natural style of writing. We believe with him that, while many teachers are able to improve the grammatical construction of sentences, few succeed in developing any power to talk naturally and forcibly with the pen on any subject whatsoever. Compare the rapid and racy chat of half a dozen bright school boys and girls about anything in which they are really interested, with a series of compositions written by the same children, according to ordinary school methods. An hour of their conversation literally reported, would be the most entertaining reading; their school compositions would be a fearful nightmare to the teacher doomed to correct them in the regulation way. DeQuincy, whose own style is one of the marvels of modern English, insists that the best style, at present, is found in the private correspondence of educated women.

One day last summer, we received a letter from a little city girl, giving her first impressions of her new boarding place in the country. She says: "Mother has written all about our journey and the village and the people we have seen; so I'll tell you about the garden and the yard behind our house." So she rattles through half a dozen pages of pretty poor hand writing and miraculous grammar till her arm is tired, and she stops in the middle of her talk. But we see the garden in front, the back yard, the hen house, the dilapidated rooster with one tail feather askew after a fight, the tom cat on the fence snarling at the butcher's dog; in short, the little girl has made a daguerreotype of the whole scene with her pen that, with slight grammatical correction, would be worthy a place in Dickens. She had evidently not been greatly interested in the journey; the village was too big to be disposed of the first day; she was already tired of people in the city; but she had rushed through the little world around her new home, and told what she had seen in the most natural way. Nobody could believe the same child the author of the dreary file of compositions marked "very well" by a succession of her painstaking teachers.

All valuable writing is what that child's letter was: a vital

description of something actually known and enjoyed. The Florentines used to say Dante had seen hell; and we see it when we read the *Inferno*. The everlasting weariness of the written word everywhere is this nightmare of unreality. The professional authors, the editors, the clergy, the teachers have gone on from the beginning, scribbling and talking of things they never saw with the eyes of the soul, which never stirred their hearts or kept them awake o' nights. So books are in the main a weariness to the flesh and a land of fog for the spirit. It may not be easy to outline a method of instruction in composition that will keep our children out of this slough of formal and unreal expression. But there are certain fundamental principles in this matter which should be taken into the heart of every teacher of youth, and, if duly pondered, may bear fruit.

The golden rule of instruction in composition is, that the child should be required to write only on a topic of which he has some personal knowledge, or in which he has some unaffected and vital interest. You require a boy or girl a dozen years' old to write an "abstract" of his history lesson. The lesson was a bore to begin with, was probably given in a way that made all events and persons in it perfectly unhuman. His abstract is the dreary shadow of a shade, a horror in the performance and an opiate in the reading. You set a frisky little Miss of fifteen to read one of Shakspeare's plays and write out the story thereof. The play is utterly outside any world in which she is interested, and her story of it would make Shakspeare groan. You stand before a class in the high school and perform an elaborate analysis of some topic you suppose adapted to composition, and request your pupils to prepare an "essay" upon it. Judgment comes to you, ere many days, in a night of dismal toil over those lifeless and worthless performances. It is hardly better in the new method of connecting object lessons with composition. Too often the information given concerning the "objects" is altogether out of the range of these infant minds. The useful knowledge adheres to the surface as burdock burrs stick to their clothes, and the "composition" is only the painful pulling off of the burrs stuck on by yourself. The radical weakness of our instruction in composition in common school, academy, and college is, that children and youth are compelled to write words and sentences about matters which are utterly unreal, or only vaguely apprehended by them. It is

extremely rare that any writer of real ability can use the style formed in school or college; and the early years of professional life are too often a dreary groping in quest of a natural and forcible method of expression. The only hope of success in teaching children to write, will be found in keeping them inside the circle of their own genuine interest, and permitting them to develop their own natural and characteristic ways of expression.

The foundation of vital expression should be laid in the recitation-room. Every child should be encouraged, in his recitation, to place his own best idea of the subject in his own language before the class. How often the teacher "cuts in" with a correction, distracts the child's attention from the subject to the words, and makes a complete muddle of his effort. Let the child give his own best view, in his own way, at first, and, when his expression is corrected, preserve as much of his own original style as may be. Many a youth has been offered up at the shrine of grammatical propriety. A style of recitation in which every child should be encouraged to develop his own peculiar mode of expression and to respect the originality of speech in his associates, would be an excellent preparation for writing.

A good teacher will also perpetually study the mental habits of his pupils, and try to learn in what things each is most deeply interested. Every opportunity to overhear the talk of children with one another, and note their characteristic ways of "putting things", should be improved. If the teacher can learn what particular thing any child is deeply concerned in, and persuade it to talk to him on paper about it, he may secure a genuine composition. All instruction about writing should be a feeling after these topics of vital interest to the scholar, and the encouragement of the most natural and characteristic way of setting forth his ideas and feelings about it. Errors in handwriting and spelling of course should always be noticed. The grammatical correction is a matter of far greater importance; for we are convinced that, in a majority of cases, the natural style of the child is destroyed in the effort to reduce his performance to a formal grammatical propriety.

We are aware that such an idea would upset a great many very elaborate and learned methods of teaching composition, greatly lessen the quantity of schoolroom essays, and make the whole process of developing the art of expression slow and dif-

ficult to the teacher; indeed, many teachers could make no headway in this direction. But we are convinced that, apart from a certain amount of needful instruction that everybody requires in the preparation of business papers and the formalities of correspondence, it would be better that nothing were done than many present methods insisted on. An absurdly disproportioned importance, in our country, is attached to making young "orators" of school boys and "authoresses" of school girls. The American people are being strangled in a muddy ocean of worthless "gab" and worse writing, and, what with our eternal speechifying and scribbling, it is a marvel that we know anything. Happy is the parent who can keep his children away from the bewilderment of children's books, newspapers, magazines, and new novels, until they have the opportunity for a fresh, natural, and wholesome observation and feeling of the life about them, and learn to speak truthfully of the things they really know. The labors of our best teachers often come to nothing, because their scholars are drenched in this turbid flood or crazed with the desire for sensational writing and speaking. Harriet Martineau congratulated Daniel Webster on the wonderful facility of speech among public men in America. "Madam", said he, "it is our great national misfortune." The grand aim of the teacher should be to rescue American children from this fog-land of words and cloudy fancies, plant their feet on realities in the world of nature and the world of souls, and develop, in every youth, that form of expression, through speech and pen, which most fitly and forcibly sets forth his own genuine apprehension of the world in which he lives.

A. D. Mayo.

Springfield, Mass.

TRAINING IN THE USE OF LANGUAGE.

In our language lessons we do not seek to go back to that underlying principle of all language—the giving of new experiences from whence new ideas shall arise, to which new words give expression. We do not in the least attempt this. Such fundamental work, so far as it comes within the province of the school, lies in the domain of the object lesson; and that it does lie there, we have the authority of the highest example and the

most ancient practice: for Adam's first lesson in language was an object lesson, and his Maker was his teacher.

Nor do we wish to be credited with the mistake of supposing that, because we give a child new words, we convey to him new ideas. Not at all. Words in and of themselves never convey ideas. The idea must first exist in the mind ere the word can be vivified with meaning. A word can express an idea, but it can not create one.

Upon neither of these ideas, then, do we base our language lessons, but rather upon this, which, if admitted, is a most ample and sufficient foundation; namely, that every child knows a great deal more than he can express,—that there lies in the mind of every child a mass of vague impressions, incomplete conceptions, half-formed ideas, born of his emotions, of his sensuous pleasures, of his joys and sorrows,—that these lie very largely in the realm of unconsciousness, from whence they may be evoked by the application of the proper stimulus and become part of the child's actual and available knowledge. To provoke the expression of these ideas, to clothe them with new words, to give a choice between words which convey the same idea, to show the child something of the harmony and melody of language,—in short, to lift him up from the simple indication of his physical wants to the expression of his higher nature,—such are the aims of our language lessons.

Such being our aims, what are our means? Principally three—pictures, stories, poems. We choose pictures because of their suggestiveness. They suggest so much to the child; they lead him on from one thing to another; they touch his experience at so many points that, if he gets well started and feels free, he will exhaust his vocabulary in telling you all about them. Our only pictures for this purpose are those found in the school readers, which, of course, are arranged with no such object in view and in no logical sequence; yet they are excellent for the purpose and render most efficient service. However, a series of pictures might be arranged which would shadow forth the child's past life, and with which you might fathom the depths of his consciouness. By the skillful use of pictures, we may obtain from the child almost his entire vocabulary, and, in addition, give him many new words.

Stories, however, offer the best opportunity to improve the child's language and culture. You can do almost anything with children, if you will but tell them stories. You can refine their

feelings, touch their emotions, rouse their enthusiasm, awaken their ambition, enkindle their devotion. There is nothing in the broad sweep of noble living or noble thinking that you can not bring to their consciousness by means of a story. As for information you can give all you wish. As for language the story is the very royal road to its acquisition. Tell a group of children a story which has awakened their interest and enchained their fancy, and then ask for it back again, and notice how accurately it will come. If you have used new words and expressions, having made their meaning clear, they will come back also, in your very words and with the very tricks of your voice.

In order to make this exercise a successful one, reproduction, both oral and written, must be insisted upon. With small children this must, of course, be entirely oral; with larger children it should be both oral and written, never, however, permitting the written to displace the oral. It is, indeed, desirable to write well; it is equally desirable to talk well. Much also can be done at this point to obtain distinct articulation, full utterance, and to cultivate a respectful and self-respecting attitude when speaking.

Pictures and stories will accomplish much; but, to show a child the melody and harmony of language, we must use poems. Some of these should be such as can be taught him; others such as he can understand when read. It may be urged that children can not appreciate poetry; but any child who has sat in the sunshine, and heard the birds sing, and felt the wind blow, and gained pleasure thereby, has within him the germs of poetic feeling. And as in the child ages of the world the first literature of all nations was ballads, so the child finds in the ballad his first delight.

There seems no reason why these lessons might not be carried up through the higher grades, broadening and deepening until the simple story expands into an article; the few new expressions into a choice essay; the simple dialogue into the drama; the ballad into the complete poem. Let reproduction, both oral and written, follow every step; and then, when the pupils reach the higher grammar grades, they will not only be able to parse and analyze and perform examples in arithmetic, but they will be able to recognize their mother-tongue when they see it. And the luckless teacher of the high school will not be compelled to explain Dickens, point out the quaint

humor of Irving, or the beauties of Longfellow, and wage an unequal war with dime novels and "yellow-covered literature", but the pupils will already have gained power to select and appreciate.

These results can be obtained, but only upon one condition; and that is, that you proclaim a divorce between language and technical grammar. If you do not, if you attempt to teach them together, and then come in with your monthly examinations in grammar, your results in language will amount to nothing. The language will be merged in the grammar very much as Jonah was merged in the whale, with by no means the same chance of getting out that he had. A knowledge, however accurate, of technical grammar will never give the power to wield the English language with strength and precision. This comes only through example and practice,—and where shall the great mass of children acquire it if not in school?

How successful this plan may be in the higher grades, we can not tell; but how remarkable its success is in the lower, we know, for it has been tested.

Cleveland, Ohio. HARRIET L. KEELER.

EDUCATIONAL NOTES.

NO. III —THE NECESSITY OF A KNOWLEDGE OF MIND TO THE TEACHER.

The Science of Education, as previously stated, embraces three grand divisions: Methods of Culture, Methods of Instruction, and School Economy. Methods of Culture treats of the nature of the powers of man, and how to train and develop them. Methods of Instruction treats of the nature of knowledge, and how to teach it. The present article and several which will follow it, belong to the second division of the science; namely, to Methods of Instruction. Methods of Instruction embraces three general divisions, as will appear from the following analysis:

Instruction implies three things—a mind to be instructed, knowledge to be used in instruction, and the method in which instruction is to be given. The first and second are respectively the subjective and objective elements of the problem; they are

united in the educational process by the third element. Method is thus the link which unites knowledge and mind in the process of education. It follows, therefore, that, in order to instruct with skill and success, a teacher needs to understand three things: first, the nature of the mind to be instructed; second, the nature of the knowledge used in instruction; and, third, the nature of the process by which knowledge may be imparted to the mind. Methods of Instruction, regarded as a science, must consequently embrace three grand divisions, as follows: 1. Nature of Mind. 2. Nature of Knowledge. 3. Nature of Instruction.

If this analysis is correct—and I do not see that it can be questioned—a course of professional instruction in a normal school, or a text-book for the aid of young teachers, ought to discuss and explain these three subjects. In this paper I present a few thoughts to the teacher on the importance of a knowledge of the first part of the subject; namely, a knowledge of the nature of the mind. The importance of such knowledge is so evident, that it would seem unnecessary to urge it; but the fact is, that teachers are generally deficient in this respect, and that educational journals seldom direct attention to it. A teacher in our common schools, who has anything like an adequate idea of the nature of the human mind, is a rare exception; and an article in one of our public journals, urging young teachers to prepare themselves in this respect, is quite as rare. The duty of cultivating the mind is frequently and forcibly enjoined; but how can a teacher be expected to give culture to that of which he is ignorant? I will state several reasons for the necessity of this preparation on the part of the teacher.

I. The importance to the teacher of a knowledge of the nature of mind, seems so evident as to be almost axiomatic. Mind is the object to be instructed; it is that upon which the teacher operates; that which he is to mould and fashion, and shape and develop. How can this be done without a knowledge of its nature, its capacities, and laws of activity? In every other department of labor, a man would be but a blunderer if he did not understand the nature of the object upon which he wrought. The farmer must understand his soil—that his low-lands are adapted to grass and his up-lands to grain—or he would make sorry work in agriculture. Selecting his fields with a knowledge of soil, the skillful farmer sows his seed and plants his

corn, and his intelligent labor is rewarded with the waving grain-fields of summer and the golden ears of autumn. There is a spiritual agriculture as well as a physical one; culture of the mind is not unlike the cultivation of the soil. The seed of truth in the soil of the human intellect, if adapted to its capacity and properly planted, will bring forth ripened harvests of knowledge and spiritual power. If a knowledge of the nature of soil is necessary to the tiller of land, who shall say that it is not of equal necessity for the teacher to understand the nature of the intellectual field which it is his duty to cultivate?

The teacher has also been compared to a musician and the human soul to an instrument on which he is to play,—a curious instrument of many strings and delicate keys which require the skill of a master to touch aright. What would be thought of an orchestra leader who would employ a person to play upon an instrument, who is ignorant of its nature, even though he were entirely familiar with the music to be performed? What ought we to think of selecting a teacher to play upon the delicate instrument of the human soul, who is ignorant of its varied capacities and the laws of their activity? When Guildenstern says he can not play upon the pipe, Hamlet replies: "Why, look you now, how unworthy a thing you make of me! You would play upon me; you would seem to know my stops; you would sound me from my lowest note to the top of my compass: and there's much music, excellent music in this little organ; yet can not you make it speak. 'S blood! do you thing I am easier to be played upon than a pipe?" Surely if it requires familiarity with the violin or harp to bring from them the tones of melody and harmony which lie sleeping in their strings, it must require some knowledge of the human soul to develop the beauty and power which slumber in this "harp of a thousand strings."

II. The teacher should understand the nature of mind, in order to cultivate and develop its powers. The object of education is twofold, culture and knowledge. These two objects are not identical. A man may have much knowledge and little culture; he may be full of learning and not know how to use it. I have known men top-heavy with learning, who went reeling through the world, useless to themselves and society. I have known persons with comparatively little learning who were efficient in the application of it, because back of it they had a well-trained mind. Many teachers seem to think that the

acquisition of knowledge is the main object of instruction and study. Than this no error can be more radical and pernicious. Knowledge is valuable to us, but culture is more valuable than knowledge. Mental power is worth more than mental acquisition. What we bring out of the mind is worth more than what we put into it. The ability to acquire and use knowledge is a thousand-fold more valuable than the knowledge itself. Willis expresses the truth in beautiful imagery when he says, "The mind forges from knowledge an archangel's spear, and, with the spirits that compel the world, conflicts for empire." Pupils forget a large part of what they learn at school and college, but the mental habits they form go with them through life. It is the teacher's duty, therefore, to cultivate the mind as well as to impart knowledge to it. This culture is given in part in the act of instruction. Knowledge properly taught gives culture to the various powers which are made active in the acquisition, and becomes an instrument by which the mind is enabled to originate and acquire other knowledge. An acquaintance with the mind is therefore necessary, that this instruction may accomplish one of the principal objects contemplated.

III. The teacher should study the mind that he may know the order of development of its faculties, and understand the educational needs of the pupil. The mind is a unit with a variety of powers. All these powers are operative at every period of life, but some of them are more vigorous at one period than at another. In childhood the perceptive powers are especially active, and the memory ready and retentive. The child almost lives in its senses. Its eyes see everything; its ears catch every whisper; its busy fingers tear down and build up all day long. Its memory holds what its senses gather, with a tenacity truly wonderful. The activity of the understanding also, in the investigation of causes, is so active as to become a source of annoyance to parents and teachers in their fruitless endeavors to answer its ever recurring questions—"why?" and "what's the reason?" Later in life these faculties lose somewhat of their energy, and other powers become more active. The child rises from its sense-life into a sphere of abstract thought; it begins to compare, to generalize, to reason. This difference of mental activity at different periods has an important educational significance. How can the young teacher who is ignorant of this fact suit his instruction to the wants of

pupil? Even the old teachers, some of whom were teachers of many years' experience, did not comprehend this matter, as some of us who were tortured by being made to sit on the high slab benches with our feet dangling in the air, and nothing to do except to be still and keep our hands out of mischief, the hardest task of all, very distinctly remember.

Understanding the educational wants of a pupil, the teacher will be able to select such studies as these wants indicate. Different branches of study call into activity and give culture to different faculties. Perception demands concrete things, to see and feel and handle. Memory requires the facts of nature and history, to store them away for future use. The imagination delights in beauty of form, color, and tone; in spring flowers and singing birds; in starry nights and leaping cataracts; in flowing measures and poetical imagery. The understanding asks for the causes of facts and phenomena and the laws which govern them. The reason stretches out beyond the known and finite to grasp the unknown and infinite. These powers require different branches of study or different parts of the same branch; and a teacher who understands these facts can select the study adapted to the faculty, can give the mental food needed. Give teachers such a preparation for their work, and there will be less time and patience wasted in our common schools in trying to make children understand long reasoning processes in arithmetic, when they ought to be drilled in the mechanical processes; and in cramming them with the metaphysical abstractions of grammar, when they ought to be acquiring skill in concrete speech.

IV. The teacher should understand the nature of the mind in order to impart instruction properly. The principles and methods of instruction are drawn both from the nature of the mind and the nature of knowledge. To understand the branches to be taught, therefore, is not sufficient, in order to understand the methods of teaching. Moreover, though it is true that these principles and methods have a dual origin, as stated, their primary source is the mind to be instructed rather than the matter to be imparted. We begin the investigation in the nature of the mind rather than in the nature of knowledge. Here, then, is a still stronger reason for this qualification of the teacher. He should do his work in the light of a knowledge of mental science, if he would do his work most successfully. He must know the nature of attention and how

to secure it, if he would make the deepest impressions upon the mind of the young learner. He must understand the activity of the perceptive powers, and the relation of the products of the senses to the memory, if he would succeed best in teaching natural science. The absurdity of teaching botany in the winter, or of teaching physiology without bringing in from field or farm-house the bones, muscles, tendons, and eyes of animals, would never have been attempted by one who had a practical knowledge of the operation of the perceptive powers and their relation to the facts of natural science. A teacher must understand something of the laws of memory and recollection, in order to attain the best results in teaching history, geography, etc. Some of the long, involved, unnatural, so-called "logical" forms in mental arithmetic would never have been used to confuse the mind and force it out of the simple and natural pathway of thought, if the nature of judgment and reasoning, as operations in the mind of a little child, had been fully understood. The "murder of the innocents" with English grammar will never end, while instructors of youth are so profoundly and, I am almost tempted to say, wickedly ignorant of the simplest facts concerning the nature and order of development of the powers of expression and abstract thought. "That which causes us to think," says Lavater, "is dear to us." Is it any wonder that that which represses and smothers thought in the mind of the child, should be detestable to him, and often cause him to hate both his study and his teacher?

In conclusion, I desire to say that this subject can not be too strongly urged. A knowledge of mind lies not only at the foundation of the science of education, but at the basis of all successful instruction. It is the corner-stone, the basis upon which rests the whole matter. As well may an architect endeavor to erect a building without a solid groundwork for its support, as for a teacher to build up the temple of knowledge in the mind, ignorant of the very foundation of his superstructure. I would make a knowledge of mental science the very first consideration in the qualifications of a teacher. It should be the first step in the professional course of instruction in our normal schools. To omit this, whatever else may be done, is to attempt to build the house without a foundation. If I could have my wish in this matter, I would have a law passed in every state prohibiting a teacher, after two years from date, who did not understand the elements of mental science, from

teaching a public school. I would have every teacher applying for a certificate examined in this branch as in arithmetic and grammar, and have a place and a mark for it in the certificate, as for the common school branches.

I believe to put new life into our common schools, we should put a knowledge of mental science into our teachers' heads. To banish some of the dullness and stupidity from the minds of our pupils, and put intellectual vigor and a zest for study in their place, give us teachers whose labor can be guided by the light and moved by the inspiration which flow from a knowledge of the laws of mental activity. Such knowledge will be as a new star in the educational horizon,—a morning star that will prove the herald of a brighter day for American schools and American society.

State Normal School, Millersville, Pa. EDWARD BROOKS.

ONE WEEK IN A PRIMARY SCHOOL.

In a neighboring town a vacancy occurred from sickness in the primary department of the public school. No friend was at hand to fill the place of the sick teacher, and, in lieu of a better substitute, we proffered our poor services. A week was spent with the joyous hearts, and fresh young faces; and how we loved each hour. How we enjoyed their gentle caresses, and how their freckled faces and tow heads reminded us of olden days.

The school is considered one of the best in the state of Michigan, and its primary departments are said to be rarely equalled. A principal of wide culture, polished manners, varied and extensive information, attends to his duties with a punctiliousness with which the public can find no fault. We think we have never seen primary schools conducted with better ability, and yet what school, or what teacher, will not fail in some one particular—in some one jot or tittle of the law. With all carefulness, with all patience, with all study, with all experience, who has reached perfection? No one ever yet saw a *model* school, or a model teacher.

Our week's experience in this primary school revealed some things which, it seemed to us, might have been changed for the better, and it has occurred to us that the same may be true

with many other schools in our land. We were satisfied that the reading had not received sufficient attention. A few of the pupils read well. Their words were spoken distinctly, and they could be heard with ease in any part of the room; but the most of the reading was a confused, miserable, stumbling jargon, entirely unintelligible to any listener. One phase of the recitations in reading created no little surprise in our mind. Many of the pupils, when called upon to read a line, a verse, or a section, would repeat the whole portion assigned, without once looking upon the page before them; and we as often found a child reading out of the window, as out of the book! Upon a slight examination, we found that a majority of the class could recite whole chapters of their lessons with scarcely a mistake, but opening the book, and selecting a verse, or page, that had just been repeated, and pointing to the words themselves, separately, we discovered that the pupils could not name them; in many cases, they could not tell a single word at sight. Some were found who could name but very few of the letters—and yet, the text-book of this class was the Second Reader!

This seemed to be the result of much carelessness on the part of the teacher. The "little children" *learned* their lessons by hearing other members of the class read them, without its being once observed by the teacher that so many of her pupils were passing over page after page without being able to *read* a sentence.

The spelling was not of a much higher order of excellence than the reading. The classes spelled long columns of words without understanding the meaning of even a single word, and the character of the spelling, under such a regime, can be readily imagined.

But there were many things in this primary school which the most untiring diligence could not have much improved. The appearance of the school was all that the most artistic taste could desire. The passing of the children to and from their several classes seemed perfect. They sat with heads well erect, hands folded, books in exact position, and, at the first tap of the bell, all rose, and their little toddling steps were like those of well drilled soldiers.

The physical exercises were of the same cast. The most accomplished gymnast could scarcely have made a criticism, and it was manifestly evident that a very great amount of

time and labor had been spent in attaining a high standard of excellence in this really true and useful art.

The music too was the most perfect of its kind. The teacher possessed rare accomplishments in this needed branch of school requirements, and no bird's throat ever warbled more melodiously than did these happy children, when performing their simple exercise songs.

All these things, which aid so much in the *appearance* of a school, especially when before the public, had received the closest and most careful attention. Weeks and months must have been spent in a severe drill to reach a degree of perfection so beautiful, and so attractive. A stranger visiting this school and spending perhaps half an hour, would have said immediately, that here was a *perfect* school, *model* pupils, and *model* teacher!

During our brief sojourn in this schoolroom, we wondered why there should be such poor reading and spelling, and such consummate dexterity in manual exercise? How such a fine taste for music had been developed in children who were not capable of reading plainly and correctly one verse from the Second Reader? Here was evidence of a master spirit, but why has not the most important part of school labor—the essentials—received as much attention as the general tone and appearance of the school indicated had been given to music, gymnastics, theatricals, &c.?

But, as our week's work came to a close, the curtain of our mental vision was drawn aside, and a few things which came to our view, we will mention next month.

Three Rivers, Mich. SARAH C. STERLING.

——THE daily marking of recitations has been discarded by many of the most successful teachers, and monthly written examinations have been substituted. The advantages claimed for the latter are: *first*, a more thorough test of the real scholarship of the pupil; *second*, the pupil is led to study the subject beyond the limits of the text-book; *third*, the retentive powers of the pupil are tested; *fourth*, an opportunity is afforded to lift the teacher out of the narrow ruts of mere routine; *fifth*, the attention of the teacher and pupil may be directed to important parts of a subject not thoroughly understood by the pupil; and *sixth*, it is a valuable exercise in composition.—R. W. STEVENSON.

EDITORIAL DEPARTMENT.

—— One of our educational exchanges, which publishes monthly what is said of it, including ordinary business letters, submits to its readers "whether it is not more a matter of *ability* than of *taste* with our contemporaries whether they do likewise or not." This reminds us of a tipsy fellow who complacently appealed to the bystanders to decide whether their sobriety was due to a *want* of money or to *stinginess* in the use of it! He could see no other reason for their not being in his condition. We assure our happy contemporary that we could occupy much more space monthly than it does with like and stronger commendations, but, without raising the question of taste, we can fill our space *with matter of more practical value to our readers!* We submit, however, whether the question of good taste is avoided by putting these puffs under the heading, "Publishers' Department."

—— In referring last month to the impossibility of determining the number of youth growing up unschooled by comparing the enumeration with the enrollment, we used one expression which we wish to cancel. More than half-a-dozen school officers, whom we know personally, have made the error referred to since we first called attention to it, and we are sure that no one of them acted the part of a charlatan in so doing. Each one, without doubt, honestly believed that the estimate made was warranted by the facts. In our earnest desire to correct what we believe to be a mischievous error, we used too strong a term, though it had no personal reference. What we should have said is, that the assumption of ability to make such an estimate is evidence that all the elements of the problem are not clearly understood. Our position is sustained by the fact that, wherever a careful census has been taken to determine the number of unschooled youth, the estimates referred to have been found very far from the truth.

—— We are sure that our readers will not feel that we are giving them "too much of a good thing" in the two papers in this number on the teaching of composition and language. They discuss the subject from different stand-points, and yet agree in the important principle that the pupil should express his own observations, thoughts, feelings, and experiences. Dr. Mayo's objection to the prevailing method of teaching composition, is certainly well taken. Miss Keeler's paper is the substance of an address which she gave at the February meeting of the N. E. Ohio Teachers' Association, as an introduction to a practical exercise in language, conducted by one of the Cleveland teachers. She kindly consented to submit it to writing for our pages. Miss Keeler has the supervision of the instruction in the primary schools of Cleveland, and her paper may be regarded as a clear and concise explanation of the course of language training therein adopted.

—— One of the most plausible objections urged against county supervision is, that the superintendent is not able to visit the schools under his care often enough to make his services of much practical value. Unquestionably our country schools ought to be officially inspected oftener than once a term, but, to say the least, this is better than *no* inspection. The fact that they really need ten inspections a term, is not a valid objection to their having one. But there is much more value in the one brief visit of the superintendent than is apparent from an outside view. The mere fact that the school is to be subjected to the scrutiny of an expert, who at a glance may detect weaknesses and errors, makes the teacher more careful and thoughtful in the methods of instruction and discipline employed, in the care of school property, etc. The prospective influence of the visit may be even greater than its subsequent influence. But the value of the services of a county superintendent is not due, even chiefly, to his personal visits to the schools. As the official sentinel of the schools, he guards them against incompetent and unworthy teachers; he has the organization and direction of institutes, and other agencies for the improvement of teachers; he may hold township and other local conventions for school officers and the people generally; and in many other ways he may improve the schools and advance the interests of education. This is not theory, but fact fully tested by experience.

—— In his report at the Boston meeting of the National Educational Association, Prof. Phelps, of Minnesota, advocated the organization of a system of normal training schools, consisting (1) of a school or faculty of education in each university to teach the nature, ends, means, history, and literature of education, with the principles and methods applicable to higher instruction; (2) a professorship of education and didactics in every college and high school to teach the true theory of education and its relations and history; (3) one or more normal schools or colleges of a high order in every state, for the special training of teachers for high schools and elementary normal schools, and for the preparation of school superintendents for counties and cities; (4) an elementary normal school in each county for the training of teachers to be employed in primary and intermediate grades of instruction and in the mixed schools of the rural districts; and (5) at least one annual normal institute in each county, the session to continue from two to six weeks, and to be under the joint tuition of county superintendents and the instructors of the training schools. He stated that this system contains no *new* agencies, but combines those which now exist, and which, here and there, are acting with vigor and efficiency. He believed that the educational necessities of the country demand that they be conjoined and brought into general use. In states where none of them now exist, he thought it would be best to begin with the higher normal school and the normal institutes. The most noticeable feature of the scheme is the omission of the present brief county institutes, these being evidently regarded as temporary expedients.

——Supt. Bryant, of Burlington, Iowa, writes us that he did not intend that his special report on the "Relation between Language and Grammar", to which we referred in our February issue, should give the impression that he would advocate the entire omission of the study of English grammar in our schools. He adds:

"By all means let 'language as a science' be studied, but only by pupils who remain long enough to make it practicable for them to enter upon and successfully pursue such study. What I intended to advocate, and what I succeeded in bringing about for the schools of this place, was (1) the omission of text-book work in grammar in the district schools, including all grades below the high school; (2) the adoption of a full course of language lessons, providing for '*daily* instruction and practice in composition' from the day of admission into to the day of final withdrawal from the district school; and (3) a change of the *method* of studying grammar in the high school, the book being no longer a recitation *text*-book, but a recitation *reference* book. Its study is taken up in this way on the *same day* that the study of algebra is commenced, and we expect it to be faithfully pursued throughout the whole of the four years occupied in completing the high-school course."

This course of instruction is clearly indicated by a syllabus prepared for the guidance of the teachers of grammar in the high school, and by a tabular statement of the exercises in composition in the district schools.

——There lie before us two earnest editorials, clipped from two of the leading daily papers of the country, both urging that teachers should not require pupils to study out of schools hours. "No child", says one, "should be compelled to spend so much of the day in brain work", and parents, it is added, should not be forced to teach sleepy children in the evening to keep them from falling below their classes. Whether this complaint be reasonable or not, it is evident that public opinion is setting against the requiring of home study even of our high-school pupils, and, at the same time, it is at least approving of a reduction in the number of school hours. In many, if not most, of our cities the schools are now in session but five hours a day. These facts make the arrangement of a course of study in our schools a very difficult problem. If the pupils in our high schools and the more advanced grammar-school classes can spend but five hours a day on school work, there must be either a considerable reduction in the number of studies prescribed, or much less must be attempted in each branch. The attempt to go over extended courses of study in reduced time, is now resulting in much skimming and superficial work. How is this difficulty to be overcome?

——We frequently see or hear the statement that the pupils in our schools do not spell as well as the pupils spelled twenty to thirty years ago, but those who make this assertion, have never produced satisfactory evidence that it is true. The truth of such a statement can only be ascertained by a wide comparison of results, and this has never been made. It evidently will not do to compare the spelling in the schools of a certain town in New England with the spelling in the schools of a western township or village; nor will it answer to compare the spelling in

country schools with that in the schools of cities and towns. The results obtained by such comparisons may, for obvious reasons, be exceptional. Manifestly no opinion can be reached by a comparison of a father's spelling at twelve years of age with that of his child who has like school advantages. It would require a large number of such individual cases to warrant a generalization. We suspect that this asserted decline in spelling is generally based on the belief either that less attention is given to spelling than formerly, or that the present methods of teaching it are less efficient. It is an *inference;* not an ascertained fact. Spelling was the only branch that was thoroughly taught in the schools of our boyhood. It was the school hobby—an excellent one—and yet not one-fourth of the pupils spelled well. When in the spelling matches and spelling schools we rose "to spell down", it only required two or three "rounds" to seat nine-tenths of the contestants. There was a fearful amount of poor spelling then, and if the children, now attending school, spell worse than their fathers and mothers did, they are certainly to be pitied. But we make no defense of any neglect of spelling. It should be made the hobby in our schools, and it should be well ridden.

TWO DEFECTS IN GRADED SCHOOLS.

There is a growing conviction among intelligent observers of our system of graded schools in cities and towns, that it is not flexible enough. As generally administered, the system is increasingly procrustean, demanding not only a uniformity of ability but also of opportunity, and the unfortunate children who, for any cause, can not keep even step with the advancing columns, soon drop out of school.

The plan of classifying pupils into grades, separated by a year's interval, unquestionably cuts short the school advantages of a considerable number of pupils. Those who fail to meet the conditions of promotion —and a considerable number must necessarily fail—are obliged to go over a second time the work of an entire year. This is regarded by most parents and pupils not only a serious loss of time but a degradation, and the result is that many of the pupils who fail or expect to fail to be promoted, leave school.

As a remedy for this evil, Supt. Harris, of St. Louis, recommends that the grades or classes of pupils in city schools should be separated by intervals of only about five weeks' work. This, he urges, will permit the promotion of the best pupils in each class without serious loss or discouragement to those who are left. We have long believed that the different grades of pupils in our schools should not be separated by an interval of more than twelve weeks. This would permit thorough examinations, the promotion of the prepared pupils, and, at the same time, it would greatly lessen the number of withdrawals from school because of failure to be promoted to the next class. It would also avoid the expedient of transferring entire classes, irrespective of conditions—a practice

which effectually chains the bright pupils to the dull ones, to the great disadvantage of both.

Another cause of increasing complaint against the graded system is its want of adaptation to the necessities of those who can not give their whole time to school duties. "The schools," says the *Christian Union*, "allow no divided allegiance. If the boy goes to school, he must go steadily, and give it the heart of the working day." No provision is made for children who must devote a part of each day to labor. Hence young children are taken out of school to assist in household duties, to sell papers or do errands, or to render other assistance, really demanding but a portion of their time. Many pupils are withdrawn from school at a very early age to learn trades. They are too young to work more than the half of each day, and would make even more rapid progress in manual labor, if they could spend the other half in school. But the doors of the public schools are closed against them. They must choose between the shop and the school, and the necessity of earning a living as early as possible scarcely permits in many instances a choice.

The failure of the public schools to accommodate this class of pupils, the very class which, above all others, needs their advantages, has been too generally accepted as unavoidable. Whenever the necessities of the family have demanded any portion of the regular school hours, children have quietly dropped out of their classes, and the schools have gone on apparently unconscious of their absence. But the proposition to enact laws compelling parents to send their children to school, has raised the inquiry whether the schools are not responsible for some of the absenteeism to be thus corrected. It is urged that the first step is to adapt the schools to the necessities of all classes.

As a means to this end the *Christian Union* suggests that the public schools should be organized on what is known as the half-time system,—a system tried with encouraging results in Europe and also in the primary schools of several cities in this country. It is urged that the adoption of this system would not only place school advantages within the reach of many children now deprived of them by the absolute necessity of devoting at least a part of each day to labor, but it would double the number of pupils instructed, with no addition to the cost. The *Christian Union* also maintains that the uniting of labor and schooling is the true idea, that children who devote their whole time for eight to ten years to schooling, are not then likely to enter on manual labor with much enjoyment, and, besides, that labor and schooling, when united, assist each other. The half-time pupils prove, as a rule, as apt scholars as their full-time classmates, and, at the same time, more skilled workers than their unschooled work-fellows.

These considerations have certainly great weight, but we are not convinced that the adoption of the half-time system in the upper grades of our schools is necessary to secure the desired end. A great many of the pupils in city schools would not engage in manual labor the half of each day were the half-time system adopted. If in school only half of the day, they would spend the other half in idleness, on the streets, and some in worse places. When no home study is required, the present

system allows some eight hours a day and every Saturday for labor and recreation. This is found to be time enough for many children to do all the work that is provided for them. It is possible that it would be better if all our youth had regular work the half of each day, but the public schools can not change the usages of society in this respect. They must conform to *what is* rather than to what *should be.*

It has also been suggested that half-time schools might be organized for working children, and that the present system be continued for others. This involves not only a classification but a *separation* of children on the basis of manual labor, and we have already quite enough of this class principle in the organization of our schools. With separate schools for colored youth, for German youth, for Catholic youth (so persistently asked for), and for working youth, the unity of the school system would be pretty effectually destroyed. We believe that the difficulty under consideration can be successfully met without organizing separate schools for working children. What is needed is to make the course of study and the requirements of our schools flexible enough to accommodate this class of pupils. Instead of half-time schools, we would suggest *a half-time course of study,* in all grades above the primary; and this could be added with little difficulty. It is not necessary to require all the pupils in our public schools to take the same number of studies and advance with even step through the course. This procrustean device must be given up, if the public school system is to do its full legitimate work as an agency for the education of the whole people. Instead of excluding pupils who can not meet all the conditions of a complete and thorough course of elementary education, it must provide for such pupils the best education possible under the circumstances. This may involve some loss in uniformity and system, but there will be a gain in usefulness—a result more important than mechanical perfection in classification.

This half-time course should include the more important and essential branches of study, and it should be taken only by those who can attend school but half of the time, or who are physically or otherwise unable to take the regular full-time course. All abuses of the system should, of course, be carefully guarded against. There would probably be few applications at first for the half-time course, but it is believed that many working children, who can not now attend school, would avail themselves of its advantages when it is once known to be a practicable and fixed feature of the school system. The plan is earnestly commended to the consideration of the directors of the public schools in cities and towns, with the belief that it is at least worthy of a trial.

OHIO SCHOOL RECORD FOR 1872.

We are indebted to School Commissioner Harvey for advanced sheets of his annual report for the school year ending August 31st, 1872. In literary excellence it is one of the best official documents which we have read in years. Whether elegance, perspicuity, or grammatical accu-

racy be considered, it will stand criticism. It is also commendably free from those unqualified criticisms and hasty and sweeping generalizations, which are too often found in school reports, and which are seized upon by the enemies of the public school system to prove it a failure.

The statistical tables are very full and complete. We select the following items of interest:

Number of township school districts	1,344
Number of separate school districts	549
Number of sub-districts in townships	10,695
Number of school-houses in townships	10,687
Number of school-houses in separate districts	978
Number of school-houses erected in the year	566
Cost of school-houses erected and grounds	$893,422
Total estimated value of school-houses and grounds	$17,168,196
Whole number of school-rooms	14,201
Number of unmarried youth between the ages of five and twenty-one in September, 1871	1,058,048
Number of youth between the ages of five and sixteen years	854,607
Number of pupils enrolled in public schools	694,348
Number of pupils between five and sixteen enrolled	609,039
Average number of pupils in daily attendance	408,538
Number of different teachers employed	22,061
Number of teachers necessary to supply the schools	14,788
Number of teachers employed the entire school year	7,085
Number of local superintendents employed	177
Number of different applicants for county certificates	23,151
Number of different applicants rejected	4,629
Average number of weeks primary schools were in session in townships	26.37
Average number of weeks primary schools were in session in separate districts	34.18
Average monthly wages of teachers in townships, not including high schools	male, $39; female, $26
Average monthly wages of teachers in separate districts, not including high schools	male, $58; female, $36
Average monthly wages of teachers in central high schools in townships	male, $64; female, $43
Average monthly wages of teachers in high schools in separate districts	male, $81; female, $56
Receipts from state tax (one mill)	$1,494,588.02
Receipts from local taxes	$4,933,759.08
Receipts from interest on irreducible school funds and rents of school lands	$24,194.41
Receipts from fines, licenses, etc	$234,944.07
Receipts from sale of bonds	$508,852.55
Balance on hand Sept. 1, 1871	$2,393,376.86
Total receipts	$9,813,714.99
Amount paid teachers	$4,219,563.04
Amount paid for local supervision	$129,615.07
Amount expended for sites, buildings and repairs	$1,428,964.91
For fuel and other contingent expenses	$1,039,215.18
For interest on and redemption of bonds	$566,498.43
Total expenditures	$7,383,856.63
Average rate of local school tax in townships	3.04 mills
Average rate of local school tax in separate districts	6.37 "
Number of county teachers' institutes held	69
Cost of the institutes held	$16,262.86

A comparison of the above statistics with those returned in 1862, shows an increase in the enumeration of over 137,000, and a decrease

in the enrollment of over 56,000. But it would be a great mistake to suppose that there has been actually any falling off in the number of pupils attending school. The enrollment reported in 1862 was too great, owing to the fact that the *re*-enrollments were not deducted, and hence thousands of pupils were counted more than once. Many township clerks added the enrollments for the several terms, and reported the *sum* as the number of different pupils enrolled in the year! Attention was called to this error in the report for 1863, and the blanks distributed in 1864 specially provided for its correction. As a result the enrollment returns for 1865 gave an aggregate of only 702,552, and a careful examination of the returns of each township and district in thirty counties revealed errors amounting to over 20,000, which reduced the enrollment of that year to less than 683,000, against 750,413 in 1863. The actual enrollment did not probably exceed 675,000. We refer to this to show how much depends on the accuracy of school statistics.

The number of youth in the state between sixteen and twenty-one years of age is estimated from the number in forty-five counties from which complete returns of this item were received. If we knew the number of children between five and six years of age in cities and towns wherein children under six are not admitted, and the number of pupils attending private schools, we should be able to tell very nearly the number of youth under sixteen years of age, "due at the schools," who attend some portion of any given year. The withdrawals from school at the ages of thirteen, fourteen, and fifteen would, we think, account for a considerable number of the absentees. Commissioner Harvey estimates that over 72 per cent. of the youth between five and sixteen years of age attended school last year. If, as he suggests, due allowance be made for those under six, who are excluded from school the enrollment was full 80 per cent. The absentees doubtless include many children—much too many—who are growing up unschooled and ignorant.

The Commissioner ably discusses several important topics, including the higher educational institutions in the state, the examination of teachers, teachers' institutes, drawing, morals, county supervision, the township system, and normal instruction. His views on the examination of teachers and normal instruction have already been presented to our readers, and, in due time, we hope to notice his suggestions and recommendations on several other topics.

The annual reports of the graded schools in the leading cities and towns of the state show important changes in methods and courses of instruction. The formal study of English grammar is begun full two years later than formerly, and is preceded by a progressive series of language lessons. The object lessons are giving place to a course of oral instruction in the elements of natural science. Map drawing holds a prominent place in the instruction in geography, and drawing has been very generally introduced, and Cincinnati, Toledo, and several other cities have attained very creditable and promising results. Mental and written exercises in arithmetic are conjoined, with a positive gain in both time and results.

EDUCATIONAL INTELLIGENCE.

—— An exchange states that in Scotland one young man to every 1,000 of the population goes to college; in Germany, one to every 2,600; and in England, one to every 5,800.

—— There is an association in Switzerland, which is opposed to compulsory education, but is in favor of making the exercise of civil rights depend on the possession of a prescribed amount of knowledge.

—— A society has been formed in France to erect and assist in erecting school buildings in destitute places. It started with a capital of five million francs and an earnest appeal to the public to aid in the enterprise. The prospectus states that there are ten thousand communes (communities) in France in want of school-houses, and it asserts that the future and the fortunes of France lie in the creation of schools.

—— The Scottish National Educational Association declares that the state should make provision only for secular instruction, which all children may receive in common, and that no system of national education will be satisfactory, which authorizes the application of the public money, either by government grants or by local rates, to the teaching of the theological tenets of any religious sect.

—— The constitutional convention of Pennsylvania has adopted a section declaring that women of the age of twenty-one years and upwards shall be eligible to any office of control or management under the school laws of that state. This is right. Women are eligible to school offices in England, but they can not be even school examiners in Ohio.

—— Commodore Vanderbilt has given $500,000 to Bishop McTyeire, of the Southern Methodist Church, to establish a university in Tennessee, the Methodists agreeing to increase the endowment to $1,000,000; and he has given another $500,000 to erect a large seminary for women at New Dorp, Staten Island.

—— The main buildings of the Ohio Reform School for Girls at White Sulphur Springs were burned on the 24th of February. When the alarm was given, the 153 inmates were all in the chapel, listening to addresses by members of the legislative committee. The loss is estimated at $40,000. The pupils are temporarily accommodated in buildings which were not destroyed by the fire, and which have been fitted up for the purpose.

—— It is reported that Indiana has passed a law creating the office of county superintendent of schools. The superintendent is to be elected by the school trustees of the several townships, who constitute a county school board, to meet twice a year. The friends of school progress in Indiana united several years ago and secured the establishment of a first-class State Normal School, and now they have secured county supervision.

—— The House Committee on Education and Labor to whom was referred the bill to establish a national university, gave it unanimous approval and earnestly recommended its passage. The committee's report is a brief but strong presentation of the need of such a university and of the merits of the plan of organization embodied in the bill before Congress. The bill was recommitted. The Senate Committee also approved of the bill, and authorized Senator Patterson to prepare a report. The Credit Mobilier investigation explains its non-appearance. The friends of the measure look for early and favorable action by the next Congress.

—— The Jubilee Singers, led by George L. White, the treasurer of Fisk University, Tenn., undertook last year to raise $20,000 to erect a new building for the better accommodation of the institution. At the close of the year they had raised nearly $25,000, and they now propose to increase the amount to $70,000. A new and beautifully located site, containing twenty-five acres, has been bought for $20,000, and the work on Jubilee Hall, which is to cost $50,000, has been begun. We most heartily commend the Jubilee Singers and their mission to the public, and we hope that their unrivaled concerts may continue to draw crowded houses, to touch generous hearts, and to open well-filled purses.

—— Mr. E. Steiger, the German publisher and bookseller of New York, is engaged in making a complete collection of American periodical publications for the Vienna Exposition. There are some seven thousand such periodicals published in this country, and Mr. Steiger proposes to show that the United States stands at the head of the nations in this department of literature. To enhance the value of this collection, Mr. Steiger is preparing, for world-wide distribution, a complete and accurate catalogue in which the name of every periodical is to be given and its nature, aim, and scope briefly detailed. He also wishes to append to this catalogue a list of *original* American publications, including translations, but not including school books. The publishers of periodicals and all authors and publishers of books are requested to apply to him *at once* for the requisite *blank forms*. Mr. Steiger has also begun the collection of the periodicals of every country in the world, and we hope he may be able to complete it before the Centennial Exhibition in 1876.

—— Rev. S. S. Orris has been elected to the chair of Greek in Marietta College, to succeed the venerable Dr. John Kendrick, who has tendered his resignation to take effect at the close of the present college year. Dr. K. has been at Marietta since 1840. Prof. O. is a graduate of Nassau Hall, and is regarded as a man of eminent linguistic attainments. He has recently returned from Germany.—J. K. Pickett, formerly of Ohio, is now superintendent of the public schools of Independence, Iowa; salary, $1,500.——Jesse H. Brown, of Richmond, Ind., has entered on his duties as superintendent of the Northern District Schools, of Indiana, and J. E. Hanley, the superintendent of the Southern District Schools, has been obliged to resign on account of ill health. —— Supt. J. H. Smart, of Fort

Wayne, was elected president of the Indiana State Teachers' Association at the late meeting at Logansport. —— Edward Tompkins has donated to the State University of California forty-seven acres of valuable land in the city of Oakland, to endow a professorship of Oriental languages and literature. —— Gov. Hartranft, ot Pennsylvania, has declared himself in favor of the enactment of a law compelling school attendance. —— Prof. Henry N. Day, formerly of Ohio, is now editor and also one of the proprietors of *The College Courant*, the best college journal in the country. —— Supt. W. E. Crosby, of Davenport, Ia., recently gave a lecture in the Library course of his city on the "Political Bearings of Popular Education." The *Gazette* pronounces it one of the finest lectures heard in Davenport this season. —— Dr. A. D. Mayo recently addressed the teachers of Springfield, Mass., on "Motives in the School-room," we need not add, to their delight and profit. —— A. Laughridge is superintendent of the public schools of Newton, Iowa.

—— A law forbidding corporal punishment in the public schools of New Jersey was enacted in 1867. At first nearly all the teachers regretted its passage and few obeyed its provisions, but it is the opinion of the State Superintendent, Hon. E. A. Apgar, that a large majority of the teachers would now oppose its repeal, and that three-fourths of them entirely dispense with the use of the rod. He thinks that the effect of the law has been good. It has led teachers to make the experiment of governing without corporal punishment, and many have been successful. He states that, "as a rule, those schools in which the rod is not used, are better governed than those where its use is continued." It is not known, we suppose, to what extent other punishments, equally objectionable, may have been resorted to. A correspondent of the *New York School Journal* states that "cuffing," one of the worst forms of punishment, is common in the schools of that city, where the use of the rod is forbidden.

Ohio.—The public schools of Xenia have added a number of finely executed charts and maps to the contribution of Ohio to the Vienna Exposition. It is believed that few schools in the country will present as handsome specimens of artistic skill. An important characteristic of the maps is their accuracy.

Dayton. — We have read with special interest the excellent report of the board of education for the school year ending June 30th, 1872—a year, which, as President Wood states, marks an important era in the history of the schools of the city. For many years (1856 and 1857 excepted) the public schools of Dayton were under the immediate supervision of the principals of the high school and the several district schools, who devoted a part of each day to this duty. In 1871 the board of education decided to employ a general superintendent, with an assistant, and, to avoid any increase of expense, female principals, at a salary of $1,000, and with few supervisory duties, were substituted for male principals at a salary of $1,700. The experiment is reported to be "eminently successful." The schools have made decided progress, and the

board strongly commends Supt. Higley for the faithful and successful manner in which he has discharged his duties, and he, in turn, bears testimony to the efficiency of the lady principals, stating that there has been an increase of good order, and that the teaching has been as thorough as it was in former years. "It is safe," he adds, "to conclude that ability and success are quite independent of sex." We see so much in this report that is worthy of notice, that we find it difficult to make a selection. We can not omit a reference to the normal school, organized in 1869, and now fully established—"a permanent fact." The course of study is limited to one year, and pupils are admitted in September and January. Each class is divided into two sections, the members of one section being engaged in the practice-room while those of the other are engaged in study, the sections alternating every four weeks. This plan demands but a small number of training teachers, but the superintendent thinks that the pupils ought to give more time to study and less to practice. The school has graduated forty-one pupils, thirty-six of whom are now employed in the Dayton schools. We can note but one of the beneficial changes in methods of instruction. The daily marking of recitations was discarded in the district schools at the beginning of the year, and semi-quarterly written examinations substituted, the questions being prepared by the superintendent. The summary of statistics shows that 5,715 pupils were enrolled, with an average daily attendance of 3,329. Less than ten per cent of the pupils enrolled were over *fourteen* years of age; about fifteen per cent attended less than two months, and more than thirty per cent attended less than four months. The number of teachers employed was 91, and the salaries of teachers and superintendents amounted to $65,302.59. The statistics of the current year (1872-73) show a marked increase in the enrollment and also in the daily attendance, and the evidences of better work and increased success, in many respects, are apparent.

Toledo. — Having never had an opportunity of visiting the public schools of this city, we spent several hours in the examination of the volumes prepared for the Vienna Exposition, with a view of becoming better acquainted with the course of study, the methods of instruction employed, and the results actually attained. The eight volumes of examination papers represent all the subjects taught in the schools, whether orally or from text-books, and they are so arranged as to show the work done by the consecutive classes. One of the most noticeable facts shown by these papers, is the complete union of oral and text-book instruction, especially in the lower grades. The oral instruction has a direct bearing on the text-book course, each aiding and supplementing the other, and neither the recitations nor the examinations run in a narrow groove. This feature is specially observable in the papers on geography. The papers of some of the high-school classes are, however, a little too text-bookish, showing too much the results of memorizing. The papers on botany and natural objects, the results of oral instruction, are very creditable. We were particularly pleased with the specimens of drawing and map-drawing, selected from work done by the pupils the first four months of the present school year. These specimens show a

proficiency in drawing attained in very few schools, and the fact that the subject is taught by the regular teachers, except in the Central Building, indicates that the successful introduction of this branch into public schools generally does not require the teachers to be artists. All that is needed is to have the regular teachers under the supervision of a competent person. We will add that our inspection of these volumes of examination papers and specimens fully confirmed our high opinion of the character of the Toledo schools. Col. De Wolf is one of the most efficient superintendents in the country. His success in bringing out the best individual powers of his teachers, and in diffusing a desire to excel among the pupils, is rarely equaled.

BOOK NOTICES.

ADDRESSES AND PROCEEDINGS OF THE NATIONAL EDUCATIONAL ASSOCIATION, at the Session of 1872, in Boston, Mass. Published by the Association.

This volume, containing 283 pages, medium octavo size, and neatly printed, and substantially bound in muslin, is one of great value to all who are interested in the improvement of educatiou. No other volume of the year contains so thorough a discussion of the most vital educational topics of the day, or embodies so much valuable experience in school instruction and management. It is much the best volume of proceedings that the National Educational Association has yet published. All orders for the volume should be addressed to the chairman of the publishing committee of the Association, Prof. S. H. White, Peoria, Ill. The price, post-paid, is $1.75. Life members and persons who became members or renewed their membership at the Boston meeting, are entitled to a copy free.

THE ELOCUTIONIST'S ANNUAL. Comprising New and Popular Readings, Recitations, Declamations, Dialogues, Tableaux, etc., etc. By J. W. SHOEMAKER, A.M., Professor of Elocution. Philadelphia: J. W. Daughaday & Co. Price, 25 cts.

This unique manual is a happy hit. It contains choice and varied selections for elocutionary training in schools and institutes, and for school exhibitions and other public occasions; and its cheapness places it within reach of all who may wish to use it, whether as an auxiliary to the ordinary school reader, to give freshness and interest to the reading exercise, or as a drill book for institute and other temporary reading classes, or as a fine collection of pieces for select readings, recitations, and declamations. It contains 194 large 12 mo. pages, printed in clear, open type, and on heavy paper. The author and publishers intend to issue a similar volume annually.

THE NORMAL DEBATER; Designed for the Use of All Common Schools, Academies, and Colleges, as well as a Guide for Teachers' Institutes and Business Meetings. By O. P. KINSEY. Lebanon, Ohio: L. C. Kinsey & Bro.

The design of this little manual is to present, in a simple manner, those common parliamentary rules and usages which are applicable to

the management of debating and literary societies and business meetings generally. Many of these usages are illustrated by examples. The successive chapters treat respectively of the organization of a meeting, officers and their duties, duties and rights of members, the management of a motion, privileged questions, the work of committees, the order and succession of business, the nature of discussion and the manner of proceeding in debate, and hints to teachers and pupils. Among the useful "hints" in the last chapter is the absurdity of drafting long constitutions and by-laws for the regulation of literary and debating societies. The most that is needed is a knowledge of parliamentary usage, and to make their members familiar with this usage is one important object of these organizations. We heartily commend "The Normal Debater" (why called "Normal"?) to all who may wish a practical guide in the conduct of business meetings; and those who may desire more information respecting its character, are referred to the publishers' inset in our February issue.

MONTEITH'S COMPREHENSIVE GEOGRAPHY; Local, Physical, Descriptive, Historical, Mathematical, Comparative, Topical, and Ancient; with Map-Drawing and Relief Maps. By JAMES MONTEITH, Author of a Series of Geographies, Maps, and Globes. New York and Chicago: A. S. Barnes & Co.

This work is designed to be a complete text-book of geography, adapted to every grade of school and comprehending all that can be successfully studied by pupils who can devote only a limited time to the subject. It seems to be specially adapted to country schools with short terms, and to academies attended by students who desire to go over much ground in a short time. The presentation of the physical, descriptive, comparative, civil, and historical features of each country together, permits great conciseness of statement and economy of space—truly, *multum in parvo*. We notice several excellent features, including the representation of comparative areas and latitudes, the prominence given to map-drawing, the review map questions, and the topical questions, comparing the leading characteristics of different countries. If our eye is not at fault, the relief maps, except the smaller, are not a success, and yet they may prove as useful as the plan of representing configuration by different colors. The inventor of a successful method of representing the relief or configuration of the earth's surface on maps, will render the cause of education a valuable service. Our present methods are not satisfactory. The work seems to us to be too comprehensive for beginning classes. Its successful use will certainly require a wise teacher, one that knows how to select what is adapted to young children.

THE SCIENCE OF ELOCUTION: with Exercises and Selections Systematically Arranged for Acquiring the Art of Reading and Speaking. By S. S. HAMILL, A.M. New York: Nelson & Phillips. Cincinnati: Hitchcock & Walden.

This treatise is based on the belief that there is a science of elocution as well as an art, and that a knowledge of the former is an important, if not an indispensable, means of acquiring the latter. It makes the principles of expression the guide in practice and, at the same time, practice

is relied upon to make these principles clear and familiar. The author's analysis is similar to that presented by Dr. Rush in the "Philosophy of the Human Voice," but he has improved upon all the teachers of this system whose works we have seen. His classification is better, and his presentation of principles is clearer and more scientific. The analysis of utterance into thirteen distinct styles, with the specification of the attributes of each, seems to be very complete and exhaustive, though there may be a difference of opinion respecting the practical value of such an analysis in learning to read or speak. The science of elocution appears to us to have about the same relation to the art, that the science of language has to composition. English grammar and rhetoric are very useful as a means of criticism, but do they help the composer very much? But we do not suggest this view as a criticism of Prof. Hamill's book, since those who prefer to teach elocution as an art, will find the exercises and selections abundant, well selected, and admirably arranged. We unhesitatingly commend the work as one of the very best of its class.

CUTTER'S DISTRICT SCHOOL ANATOMICAL OUTLINE PLATES. Ten in Number. Published by J. B. Lippincott & Co., Philadelphia, and A. H. Andrews & Co., Chicago.

These plates are admirably adapted to school use. They are printed in colors on fine, heavy, strong paper, and are of convenient size for suspension on the wall, or for holding in the hand when this may be necessary. They are the best chart illustrations of the structure of the human system which we have seen.

HALSEY'S GENEALOGICAL AND CHRONOLOGICAL CHART of the Rules for England, Scotland, France, Germany, and Spain, (Ginn Brothers, Boston,) presents clearly to the eye what it would take many months to learn from historical works, and it can but prove a very valuable aid to the teacher or student of history. Its great convenience as a means of reference needs only to be tested by any literary man to receive his commendation. The plan can not well be described in a few words, and hence we make no attempt to do so. The chart must be seen to be understood or appreciated. It is printed on strong manilla paper, and is published in portfolio form, or in a form for suspension on the wall.

—— THE Northwestern Ohio Normal School at Ada proposes to publish a "normal literary journal", to be called *The Educational Advance.* It will contain twenty-four double-column pages, and topics of interest to teachers and students will be found in each number. The price is to be $1.00 a year; sample copy, 10 cents.

—— THE *American Journal of Education* is now published both in St. Louis and Chicago. The St. Louis journal is edited and published by J. B. Merwin, and the Chicago edition is issued by A. H. Andrews & Co. The only other material difference that we have discovered, is the date. The St. Louis editions for January and February are respectively the Chicago editions for February and March. In other words, the Chicago edition is one month late. There may be an advantage in giving the

same journal two publishers and two places of publication, but we do not see it. We did not suppose that Bro. Merwin (who is a host) and St. Louis needed to be backed by Messrs. Andrews & Co. and Chicago! What's the matter beyond the Mississippi? Is St. Louis to be annexed to Chicago?

—— The *Illinois Teacher* and *The Chicago Schoolmaster* have been consolidated, with the title of *The Illinois Schoolmaster*. The *Teacher*, which has long been one of the best journals in the country, is wholly absorbed, except one word of its name, and the new journal is the popular *Schoolmaster* increased in title, size, and subscription price. It is one of the most vigorous and progressive of our educational exchanges, and we hope it may never be obliged to strike its colors. It is edited and published by Aaron Gove and H. C. Hewett, Normal, Ill. $1.50 a year.

Oliver Optic's Magazine.—This sterling magazine is literally "the prince of the juveniles." It is always fresh, attractive, and instructive. It contains, each year, two serials by Oliver Optic; two by Rev. Elijah Kellogg, a very popular and instructive writer; and two serials for girls, besides a great variety of short stories, sketches, poems, dialogues, etc. It is printed on thick, tinted paper, and is the best illustrated juvenile in America. It is published by Lee & Shepard, Boston, at only $2.50 a year.

—— The *Ontario Teacher* is a new educational journal, published in Strathroy, Ontario, by Messrs. Ross & McColl, at $1.25 a year. It contains thirty-two large double-column pages, and is neatly printed and bound. The three numbers, now issued, are well edited, and give promise of great usefulness. We congratulate our northern neighbors on the possession of a live, practical teachers' journal, and we hope they may give it a generous support.

Cook's Excursionist.—The first number of the American edition of this well-known English paper is on our table. For more than twenty years it has done the traveling community important service. This number announces "Cook's Educational Tour to Vienna," for teachers and those engaged in educational pursuits. The price of the entire trip from New York, including every necessary expense, is to be only $400 in gold. For full particulars address Cook, Son & Jenkins, 212 Broadway, New York.

—— We have received several numbers of the *Iapi Oaye*, "The Word Carrier," an illustrated monthly paper, published by the Dakota Mission, under the supervision of Revs. Stephen R. Riggs and John P. Williamson. It is pleasing evidence that the Dakotas are making encouraging progress towards civilization. We hope that *Iapi Oaye* may always carry words of peace and good-will.

—— We have just received a box of Hunter's "Helps to History, or Historical Games with Cards on the History of the United States." They seem to be all that is claimed for them in the publisher's advertisement in another place. Our young folks will soon test their merits.

——JOHN E. POTTER & Co., Philadelphia, have in press and will shortly publish "POTTER'S COMPLETE BIBLE ENCYCLOPEDIA", a Universal Dictionary of Biblical, Ecclesiastical and Historical Information, from the earliest times to the present day, by Rev. William Blackwood, D.D., LL.D., with valuable contributions by other eminent divines. It will be comprised in about 2,000 brevier pages, quarto, with nearly 3,000 illustrative engravings.

——THE AMERICAN CHEMIST is issued monthly; each number containing forty double-column quarto pages. Subscription, $5.00 per annum, payable in advance. It is published by Henry C. Lea, Philadelphia.

NEW BOOKS RECEIVED.

NINTH CENSUS OF THE UNITED STATES. 1870. Population and Social Statistics. By Francis A. Walker, Superintendent of Census. Washington: Government Printing Office. 1872.

APGARS' GEOGRAPHICAL DRAWING BOOK. By E. A. & A. C. Apgar. Philadelphia: Cowperthwait & Co.

ADDRESSES AND PROCEEDINGS OF THE NATIONAL EDUCATIONAL ASSOCIATION in 1872. Price $1.75.

OHIO RAILWAY REPORT. Prepared by O. L. Wolcott, Commissioner. 1872.

FOURTEEN WEEKS IN PHYSIOLOGY. By J. Dorman Steele. New York and Chicago: A. S. Barnes & Co. Price, $1.50.

YEAR-BOOK OF NATURE AND POPULAR SCIENCE, for 1872. Edited by John C. Draper, M.D. New York: Scribner, Armstrong & Co.

ENGLISH GRAMMAR AND READING BOOK. By Rev. O. W. Tancock, M.A. London: Macmillan & Co.

BULWER'S LADY OF LYONS. Edited by Prof. B. Maurice, A.M. Philadelphia: J. B. Lippincott & Co.

CHEERFUL VOICES. By L. O. Emerson. Boston: Oliven Ditson & Co. Price, 50 cts.

UP THE NILE BY STEAM. By R. Etzensberger. London: Thomas Cook & Son. New York: Cook, Son & Jenkins.

THE CRITICAL SPELLER. By A. L. Barber, A.M. New York and Chicago: A. S. Barnes & Co. Price, 20 cts.

A GENEALOGICAL AND CHRONOLOGICAL CHART of the Rulers of England, Scotland, France, Germany, and Spain. By C. S. Halsey. Boston: Ginn Brothers.

GUYOT'S PHYSICAL GEOGRAPHY. Advance Sheets. New York: Scribner, Armstrong & Co.

SEXUAL SCIENCE. By Prof. O. S. Fowler. Philadelphia, Cincinnati, Chicago, and St. Louis: National Publishing Co.

SCHOOL REPORTS.

Annual Report of the Board of Education of Rhode Island. Thomas W. Bicknell, Commissioner.

Annual Report of the Common Schools of Maine. Warren Johnson, Supt.

Report of the State School Commissioner of Georgia. Gustavus J. Orr, Commissioner.

Report of the State Board of Education of New Jersey. E. A. Apgar, Supt.

Annual Report of the Superintendent of Public Instruction of Minnesota. H. B. Wilson, Supt.

Annual Report of the Department of Public Instruction of Kansas. H. D. McCarty, Supt.
Annual Report of the Board of Education of Massachusetts. Joseph White, Sec'y.
Report of the Minister of Public Instruction for the Province of Quebec. 1870–71. Pierre J. O. Chauveau, Minister.
Annual Report of the Public Schools of Baltimore, Md. Wm. R. Creery, Supt.
Twenty-fifth Report of the Public Schools of Washington, D. C. J. Ormond Wilson, Supt.
Annual Report of the Superintendent of Schools of the City of New York. Henry Kiddle, City Supt.
Fifth Report of the Public Schools of the City of Utica, N. Y. A. McMillan, Supt.
Annual Report of the Board of School Inspectors of Peoria, Ill. J. E. Dow, Supt.
Annual Report of the Board of Education of Burlington, Ia. Wm. M. Bryant, Supt.
School Report of Manchester, N. H. Joseph G. Edgerly, Supt.
Report of the Wooster Public Schools, Ohio. L. V. Dodge, Supt.
Manual of the Public Schools of Indianapolis, Ind. A. C. Shortridge, Supt.

First Annual Report of Industrial Art-Education in the State of Massachusetts. Walter Smith, State Director.
Proceedings of the Third Annual Convention of the German American Teachers' Association, 1872. W. N. Hailman, President.
An Examination of the Demonstrations of Davies' Legendre. By Chas. Davies, LL.D. New York: A. S. Barnes & Co.
City of Des Moines. Address of Citizens' Association.

ANNUAL CATALOGUES.

Cumberland Valley State Normal School, Shippensburg, Pa. Geo. P. Beard, Prin'l.
Kenyon College, Gambier, O. Eli T. Tappan, President.
University of Wooster, Wooster, O. Rev. Willis Lord, D.D., President.
Berea College, Berea, Ky. Rev. E. H. Fairchild, President.
Rhode Island State Normal School, Providence. J. C. Greenough, Prin'l.
Wisconsin State Normal School, Platteville. E. A. Charleton, Prin'l.
California State Normal School, San Jose. William T. Luckey, Prin'l.
Michigan State Normal School, Ypsilanti. Joseph Estabrook, Prin'l.
Northwestern Normal School, Republic, O. J. Fraise Richard, Prin'l.
Northwestern Ohio Normal School, Ada, O. H. S. Lehr, Principal.
Mount Union College, Mount Union, O. O. N. Hartshorn, LL.D., Pres't.
Orwell Normal Institute, Orwell, O. H. U. Johnson, Prin'l.

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[*From the New York State Educational Journal for February*, 1873.]

UNABRIDGED.

BY CHARLES T. POOLER.

Oft, as listless you 've sat humming o'er the keys of mem'ry, thrumming
Out unbidden notes of music from the slumb'ring melodies of yore,
Some trilling, thrilling note departed, the linking joys hath sudden parted,
Till, by murm'ring o'er the others, at the warbling of its brothers,
Back the truant cometh,singing softly, sweetly, as in years before,
To leave you, nevermore.

But ah! when a WORD has wandered, "*divine afflatus*" all been squandered,
On the kindred meanings pondered, through your treach'rous mem'ry's stock and store,
Spite your rhyming and your chiming, words and meanings shift and shuffle,
Till your choler wears the ruffle, and the flashing thoughts, Promethean,
Hiss upon the waters Lethean ;—dazed with doubt you pace the floor,
As thousands have before.

Then your " eyes had all the seeming of a demon's that is dreaming,"—
Vacant, flaring, glaring, gleaming, stark and staring at the unseen floor ;
Crazed with dance of unpoetic fancies, catching only synonymic glances,
As the wizard, wordless wantons hide-and-seek like Jack-'o-lanterns ;
Now revolving, now dissolving into phantom oaths you never swore,
Only felt them, nothing more.

Felt the flames of fierce affliction as you prayed, "O for a Diction-
Ary balm from ancient Gilead for a treach'rous mem'ry's Illiad
Of woes!" And your prayer was granted, by word-horror now no longer haunted,
No more demon eyes are glaring, no more phantom oaths are swearing ;
Leaves from Gilead brought by Noah, WEBSTER'S UNABRIDGED in stock and store,
On your table, evermore.

Thoughts and words from all their sources, sparkling through their classic courses,
Flashing up from new resources : Arab, Roman, Hebrew, Celt and Moor,
German, Goth and Greek, Teutonic, Saxon, Vandal and Sclavonic,
All nations, tongues and learnings, human souls in all their yearnings,
Through ages dark and ages golden, have been made to faithful pour
Into this their treasured lore.

Science, through each nomenclature, arts of every name and nature,
Their pictured symbols here explore ; and will ever bless the modern Noah
For the saving ark he builded, for the language he hath gilded
With such purity and beauty, that with stern, resistless duty,
Carping critics, flaunting, ranting, still must follow with their Babel lore ;
Ever follow in the wake of Noah, only *follow*, nothing more.

Deansville, N. Y., January 18, 1873.

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—OF THE—

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Classes will be organized in all the branches of Public School Education, and conducted with special reference to teaching them.

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apr.-3t. **WM. MITCHELL, JNO. OGDEN,** } **Associate Principals.**

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THE COMMON SCHOOLS OF BADEN.*

THEIR INNER ORGANIZATION AND MANAGEMENT.

I. Classification of Pupils.

The common school of Baden, as well as of Germany generally, is divided according to the number of teachers into two or more "classes", the younger pupils making the first class. Each class, consisting of children of different "school-years", is subdivided, as far as possible, according to the school-year. Thus the average village school, with 150 to 250 pupils, will have two teachers, four "classes", and eight subdivisions, of which latter each will represent one year of the school-period, *i. e.*, from the beginning of the seventh to the end of the fourteenth year of age. A school of 100 to 120 pupils or less will have one teacher and two "classes"—the first embracing, generally, pupils of the first, second, and third years, and the second those of the fourth, fifth, sixth, seventh, and eighth years. When the interest of a considerable number of pupils or schoolroom needs demand it,—as for instance when the number of younger pupils is disproportionately large,—the superior school council, on recommendation of the local council, may allow pupils of the first four years to remain in "Class I", to be di-

* It is to be borne in mind that Baden ranks with the foremost German states in educational affairs,—comparing favorably with Wurtemberg, Hesse, and the better Rhenish, Saxon, and Prussian provinces.

vided into two chief divisions of two subdivisions each. A corresponding change in the plan of instruction is provided.

A school with three teachers will have six classes and less subdivisions. With four or more teachers the boys and girls constitute separate subdivisions—their co-education being held admissible only by necessity. With the exception above, no "class" may contain more than three "subdivisions", and no subdivision represent more than two school years. Thus every school, village as well as city, is really a graded school, according to a system which every teacher and school officer must understand, and according to which all examinations, inspections, and promotions must be made.

Promotion from one subdivision to another is made only on examination. A pupil failing to pass may be kept another or even two more years in the same subdivision, and one year beyond the usual school period. Promotions can not well be improperly made: the teacher sees in it his own disadvantage. Receiving his appointment direct from the state council, and his school being subject to annual inspection and examination by a state councilor, his interest is in *having every pupil up to the mark.* But, again, promotions are made only under sanction of the local councils, and are subject to revision both by the circuit* councilors and state councilors, all of whom are real *school men*, having the public good and an educational reputation to maintain, and knowing that too rapid promotion is actual delay.

Such uniformity of school grading and such responsible school inspection, with their manifest and manifold advantages, are only attainable where "compulsion" puts every child in school at a specified age, and keeps it there steadily until its school period is ended, and where there is a direct and yet independent responsibility for the efficiency of each school resting severally on the teacher, the local council, circuit councilor, and state councilors.

II. Hours of Instruction.

A very striking feature of the Badish system, which prevails also in certain other German states, is worthy of special notice,

* There are in Baden eleven circuit school councilors or inspectors (much like county superintendents), paid and permanent state officers, who give their whole time to inspection and examination of schools—each having about 200 schools under supervision. There are also eight to ten superior (state) councilors, with general supervision, by one of whom each school must be annually inspected.

as it renders the grading of village schools possible, that of town schools easy and complete, and suggests various school economies. There is a "simple" or short course of common-school instruction, requiring three to four school hours daily, and prevailing in the country and smaller towns and villages, and a "broader" course, taking five to six hours daily, and prevailing in larger towns and cities. Attention is called to the former.

While in American country districts and villages pupils of all ages from six to twenty-one are in school about six hours daily for certain (winter) months, and out of school, with teachers discharged and school-houses closed, for the rest of the year, thus one teacher serving 50 to 70 ungraded pupils under every disadvantage for a part of the year, in Baden one teacher instructs in one schoolroom 100 to 150 pupils three to four hours daily during the entire year, with the great advantages of graded schools, eight unbroken years of daily instruction for every pupil, and constant and permanent employment for every teacher. Education becomes the *one business* of children, and teaching becomes a profession. By this system one teacher and one schoolroom amply suffice for each 120 pupils, or for each 600 of population. It is enough to explain that certain classes of pupils attend only the forenoon session, and others only the afternoon session of the school; but, as German pupils *spend all their hours in school in actually receiving instruction*, or drilling under the teacher's immediate supervision and direction, each receives more of direct instruction during these three and four hour sessions than he could expect in the American ungraded school during the entire day. School hours begin generally at seven A. M. in summer and at eight A. M. in winter;—no great hardship when it is remembered that the larger pupils may have their session forenoon, and the smaller ones in the more convenient afternoon. In scattered populations, where home and school-house are far apart, where children work in factories, on the farm, or attend flocks, all these circumstances are considered in arranging school hours,—every pupil having all his "hours" confined to either the morning or afternoon session and being the other half day subject to domestic calls. The various economies of such a system to pupil, teacher, parent, and community, in respect of time, money, and convenience, become manifest on a moment's reflection.

The "extended" or broader course of instruction calls here for no further remark.

The hours per week assigned to each subject of instruction are as follows:

	"Simple" Course.	"Extended" Course.
1. Religion	3 hours.	3 hours.
2. German Language	5 to 6 "	9 to 10 "
3. Arithmetic	3 to 4 "	4 to 5 "
4. Singing	1 hour.	2 to 3 "
5. Real studies	5 to 7 "	6 to 8 "
Total, weekly	17 to 20 hours.	24 to 30 hours.

Every week day is a school day, but Wednesday and Friday afternoons are generally "free." Physical training for boys and needle work for girls are always required, but generally confined to the half holidays, and not counted as "school instruction."

III. Subjects and Plan of Instruction.

These are prescribed in detail for each "class", subdivision, school year, and kind of school, so that each teacher and every school officer knows precisely what to do and what to expect in each subject for every grade of pupils. Only the general plan can be indicated here,—that which applies to the great majority of the schools, and is adapted to the simpler course of instruction. There are, however, detailed modifications to meet all cases.

Religion. Every "subdivision" has three hours, weekly, of religious instruction during its eight years' course under the direction and with the assistance of the pastor. The latter is always an educated man, a member of the local school council, generally its president, and the teacher's immediate superior. This religious instruction is never omitted, and seemingly never slighted. *A school for children without stated and direct religious instruction is not conceived of.* The lessons consist of Bible history, geography, and passage learning, Christian doctrine and morals, church history, music, and hymns. The secular authorities simply provide "hours" in the "school plan" for "religion", while the church authorities* arrange and determine the subjects. "Religious" inspection or examination belongs to the Deans—a sort of general pastors having supervision of ten to fifteen pastorates. Where a school is of "mixed"

* Both the Protestant and Catholic confessions are recognized and sustained by the state, and each has its "Superior Church Council" as a subdivision of the Department of the Interior.

confession, the priest and pastor, each under prescribed regulations, direct the religious instruction of the children of his own confession. (Most villages are either Catholic or Protestant.) No extra compensation is allowed for this religious teaching, as it is made by the state a proper pastoral function.

GERMAN LANGUAGE includes reading, spelling, writing, grammar, recitation or declamation, and composition, and consumes six to eight hours, weekly, of the "simple-instruction time" and eight to ten hours of the "extended time." Instruction in the several particulars is, for the most part, simultaneous—the aim being to give the child readiness and exactness in the various uses of language, written and spoken, with a constant effort to make each exercise help the other.

The end of each year's work is laid down as follows:

First year: Oral resolution of short sentences into words, of words into syllables, of syllables into sounds with distinction of vowels and consonants; writing by syllables of words of one, two, and three syllables, and reading of the writing; knowledge of printed text; reading of words, sentences, and easy paragraphs, and beginning to copy printed into written text.

Second year: Reading of connected paragraphs with regard to intonation and meaning; syllabic and phonetic spelling; copying from reader to slate with and without syllable-separation; rewriting from dictation what has been already written from reading-book, with special reference to the written marks of emphasis, accent, and inflection.

Third year: Reading print with special reference to exactness, fluency, and expression; understanding of what is read by explanation of unfamiliar terms, word relations, and construction; the simple sentence (subject and predicate), article, noun, adjective, verb; formation of plurals of nouns; past, present, and future tenses, indicative active; written exercises in sentences with above-named elements; copying from reading-book with separation into syllables; writing from memory paragraphs learned from reading-book; writing from dictation what was formerly copied from reader; rapid spelling with simple rules of orthography; beginning to write on paper, large and small letters and words, between (rather wide-apart) lines.

Fourth year: Reading exercises of last year combined, and reading of Roman print begun; simple sentences extended by objects; declension of nouns; nominative case, singular and plural, of personal pronouns; all tenses of indicative, simple

form of infinitive, imperative ; changing of active into passive form sentences; grammatical and orthographical written exercises ; short compositions, ornamental writing within lines, and beginning of Roman script.

Fifth year: Correct and fluent reading of German and Roman print and brief recital of what is read; simple sentences extended by adverbs of place, time, quality, and manner; prepositions, and their relations; declension of nouns with adjectives; comparison of adjectives; numerals, possessive, demonstrative, and interrogative pronouns; dictation writing, composition, and ornamental penmanship within (closer) lines.

Sixth year: To reading is added more detailed recital of what is read; reading of various handwritings; compounding of sentences, uses of conjunctions, conjugation of active and passive forms; writing from rapid dictation; composition in narrative and "story" form as before, with introduction to delineation and letter-writing; ornamental writing in German script on a single line.

Seventh year: Higher expression in reading and orderly or well composed recital of what is read; reading of various handwritings; compound structure of sentences, subjunctive mode and relative pronouns; higher composition, reproduced in extended and abridged form, with manifold sentence manipulations; letters and business compositions; higher penmanship.

Eighth year: Reading, composition, writing from dictation, and penmanship, as in seventh year; analysis of sentences; word roots, derivatives, and classification of words by families.

The most striking features of all this are: (1) The "Reader" is the basis of it all—only slate and paper besides being used—no "speller", no "composer", no "grammar"—only a few grammatical tables appended to the reader. (2) The vast amount of writing involved: from writing lessons, from spelling lessons, from reader, dictation, memory, composition, etc. The result is, Germans write well and as readily as they talk. (3) The manifest practicalness of every step. There seems to be nothing done in the schoolroom that the people are not daily doing outside.

Arithmetic, singing, and real studies (*re alien*) must be reserved for another paper.

Carlsruhe, January, 1873. Wm. H. Young.

THE CRUST OF THE EARTH AND BELOW.—II.

In the February number of this journal, the writer gave a synopsis of the arguments for and against the theory that the great interior of the earth is a mass of liquid, molten matter. From the facts there presented, it would seem that this theory, which has so long held its place, must be given up as untenable. There at once arises the question of volcanic and earthquake phenomena, as well as many things pertaining to the external configuration of the earth, which seem difficult of solution upon the hypothesis of a solid earth. It is the intention of the present paper to supplement the preceding by giving, in brief, some recent views concerning this subject. For the theory, the outline of which will be presented, the writer is indebted to recently published papers by the celebrated seismologist Mallet, Prof. LeConte, of the University of California, Prof. T. Sterry Hunt, and some others, who have alike been led to arrive at almost identical conclusions as a result of a long study of the problem. The tendency of these and many other eminent geologists is in the direction of the reconstruction of theoretic geology upon the basis of a solid earth.

Starting out with a globe of intensely heated matter, the radiation of heat will evidently be greatest from the outer surface. The result, in time, will be a globe with a hot interior and a comparatively cold exterior, but, as a whole, still radiating and losing heat. Now as this process is taking place, it seems very likely that certain portions of the surface may be better radiators than other portions, resulting in a more rapid loss of heat, and hence a more rapid contraction of those portions of the entire mass. The result of this unequal radial contraction would be to form elevations and depressions of greater or less extent upon the surface without necessarily varying the entire quantity of matter lying along those varying radii. After the earth becomes rigid, and the radiation and consequent internal contraction continues, the outer portion, being relieved to a certain extent from support below, will be subjected to immense lateral pressure or *thrust* which will, it is thought, be sufficient, in its various results, to account for the perplexing problems of the growth of mountain ranges, as well as volcanic and earthquake phenomena. This powerful lateral thrust will produce, in certain weaker portions, a crushing together, horizontally, and a consequent up-swelling of the whole

mass, and this along long lines, sufficient to account for the elevation of the greatest mountain chains. To show that this squeezing together of the mass is adequate to account for the upheaval of great mountain systems, recourse is had to the well-known phenomenon of slaty cleavage. It has been shown by Sorby, Tyndall, and others, that slaty cleavage is produced by powerful pressure, perpendicular to the plane of cleavage, by which the whole rock mass has been mashed together, shortened in that direction, and lengthened in the direction of the planes. Taking an imaginary unsqueezed cube, and subjecting it to this operation, the equal diameters have been so altered that they have, in some instances, a ratio to each other of nine to one. Taking six to one, as an average result, it can readily be shown that if a mass of sediments 10,000 feet in thickness be subjected to a sufficient pressure to develop well-marked cleavage, it would be swelled to a thickness of 25,000 feet, or an actual elevation of 15,000 feet above the original surface. It is possible here only to indicate the application of this idea to the study of the formation of mountain ranges, etc.

Now this crushing of immense quantities of rock must be accompanied by great elevation of temperature. Everybody knows that the crushing of a mass of granite to powder will result in the production of great heat, as is so frequently illustrated in the spark produced by the blow of a heel upon a stone in the street; in fact, a large part of the energy of the "crush" must make its appearance as heat. This heat may soften the rocks to permit of foldings; may reduce them to a pasty or liquid condition, and, where water has access to this locality, volcanic action, and the ejection of lava is the result.

Let us briefly examine the facts presented, to show that the above hypothesis is competent to account for the known results. It is computed that the annual loss of heat into space, at present, is equal to that which would liquify into water at 32° F. about 777 cubic miles of ice. The result of this is the continual diminution of the earth's volume as a whole. A large portion of the work thus done is re-transformed into heat in the act of crushing the solid material of the earth. Mallet ascertained, by a series of experiments upon sixteen different varieties of rock, the amount of heat generated in the crushing of given quantities. The result may be briefly stated thus: that each cubic mile of rock, of the mean material of the crust, when crushed to powder, develops heat sufficient to melt nearly

three and one-half cubic miles of the same rock. It is then demonstrated, by a process which we may omit, that the crushing of 247 cubic miles annually would be sufficient to represent the volcanic energy of all kinds displayed upon the earth. This quantity is perfectly insignificant compared with the globe itself—less than the *one billionth part.* But it is clear that an amount of energy, vastly greater than is needed to produce these results, is annually dissipated by radiation from the earth. This tangential crushing of the crust goes on "by spasms", it may be, and may develop amply sufficient impulses to produce the most violent earthquakes. Thus it appears that, upon the hypothesis of a solid, rigid globe, with a hot interior, all of these phenomena may be explained, and possibly in a much more rational manner, than upon the supposition of internal fluidity.

In the above, only the bare skeleton of the theory is presented. T. C. M.

Columbus, Ohio.

NAY AND NO; YEA AND YES.

There are some interesting historical facts connected with the words *nay, no, yea,* and *yes.* At one period in the history of our language, the following rule seemed to be based on usage: *Nay* should be used as the *negative* answer of an *affirmative* question; *no,* as the *negative* answer of a *negative* question; *yea,* as the *affirmative* answer of an *affirmative* question; and *yes,* as the *affirmative* answer of a *negative* question. Will he go? *Nay.* Will he not go? *No.* Will he go? *Yea.* Will he not go? *Yes.*

According to Marsh (see *Lectures,* 1860, p. 579) this distinction so far as *yes* and *yea* are concerned is still seen in Danish and Swedish, sister-languages of the English. The distinctions were unknown in Old-Northern, and Marsh says that he finds "no evidence that they were observed in Mœso-Gothic, although there are traces of these distinctions in Anglo-Saxon."

"So when they had dined, Jesus saith to Simon Peter, Simon, *son* of Jonas, lovest thou me more than these? He saith unto him, Yea, Lord; thou knowest that I love thee. He saith unto him, Feed my lambs. He saith to him again the second time, Simon, *son* of Jonas, lovest thou me? He saith unto him, Yea, Lord; thou knowest that I love thee. He saith unto him, Feed my sheep."—*John* xxi: 15–16.

"Doth not your master pay tribute? He saith, Yes."—Matt. xvii: 24–25.

In the Anglo-Saxon Gospels in the above cases, *yea* is *gea* and *yes* is *gyse*, thus observing the rule.

"Suppose ye that I am come to give peace on earth? I tell you, Nay [Anglo-Saxon, *ne*]; but rather division."—*Luke* xii: 51.

"And Jesus answering said unto them, Suppose ye that these Galileans were sinners above all the Galileans, because they suffered such things? I tell you, Nay; but, except ye repent, ye shall all likewise perish.

"Or those eighteen, upon whom the tower in Siloam fell, and slew them, think ye that they were sinners above all men that dwelt in Jerusalem? I tell you, Nay [Anglo-Saxon, *ne*]: but, except ye repent, ye shall all likewise perish."—*Luke* xiii: 2-5.

"Then Jesus saith unto them, Children, have ye any meat? They answered him, No [Anglo-Saxon, *nese*]."—*John* xxi: 5.

"Art thou that prophet? And he answered, No [Anglo-Saxon, *nic*]."—*John* i: 21.

It will be seen that our version in the use of *no* in the last two examples violates the rule. *Nic* is Anglo-Saxon for "not I." Other examples cited by Marsh seem, with one exception, to prove that the rule was applicable to "*yea* and *yes*" in Anglo-Saxon, but that as to *nay* and *no* usage was vacillating.

I give the following quotation from Dabney's reprint (Andover, 1837) of the original edition of Wm. Tyndale's New Testament, printed in 1526. It is from "The Gospell of Jhon", first chapter:

"And they axed hym: what then? arte thou Helias? And he sayde: I am nott. Arte thou a prophet? And he answered noo."

Tyndale and Sir Thos. More were emphatically contemporaries, in both being born in 1480; the former was burnt at the stake 1536 and the latter beheaded in 1535. In a work entitled "The Confutacyon of Tyndale's Aunswere made anno 1532, by Syr Thomas More", p. 448 of More's works printed in 1557, is a criticism of the above quotation from Tyndale. More gives it with a spelling somewhat unlike that of Tyndale's: "And thei asked him, what then, art thou Helias? And he sayd I am not. Arte thou a prophete? And he aunswered, No." More comments as follows:

"I woulde here note by the way, that Tyndal here trāslateth *no* for *nay*, for it is but a trifle and mistaking of ye englishe worde; sauing that ye shoulde see yt he whych in two so plaine englishe wordes, and so commen as is *naye* and *no*, can not tell when he should take the tone and whē the tother, is not for trāslating into englishe a man very meete. For the use of these two wordes in aunswering a question is this. *No* [nay] aunswereth the question framed by the affirmatiue. As for ensample, if a manne should aske Tindall hymselfe: ys an heretike mete to

translate holy scripture into englishe. Lo to thys question if he will aunswere trew englishe, he muste aunswere *nay* and not *no*. But and if the question be asked hym thus lo: Is not an heretyque mete to translate holy scripture into englishe. To this questiō lo if he wil aūswer true english, he must aūswere *no* & not *nay*. And a lyke difference is there betwene these two aduerbes *ye*, and *yes*. For if the questeion bee framed vnto Tindall by thaffirmatiue in thys fashion. If an heretique falsely translate the newe testament into englishe, to make hys false heresyes seeme y^e^ worde of Godde, be hys bookes worthy to be burned? To this question asked in thys wyse yf he wil aunswere true englishe, he must aunswere *ye*, and not *yes*. But nowe if the question be asked hym thus lo by the negatiue: If an heretike falsely translate the newe testament in to englishe, to make hys false heresyes seme the word of God, be not his bokes well worthy to be burned? To thys question in thys fashion framed if he wyll aunswere trew englyshe, he maye not aunswere *ye*, but he must aunswere *yes*, and say *yes* mary be they, bothe the translation and the translatour, and al that wyll holde wyth them."

This passage is given by Horne Tooke in his Diversions of Purley, p. 674, as a foot-note to the following sentence: "But, I believe, they will be as little able to justify their innovation, as Sir Thomas More would have been to explain the foundation of his ridiculous distinction between NAY and NO, and between YEA and YES."

In passing it may be proper to say, that it is strange that writers can not faithfully copy a passage from a work when appearing to be trying to produce it *verbatim*, including variations in spelling. Marsh, Tooke, and Eastwood & Wright, in their Bible Word-Book, p. 546–7, all refer to the same page of More's works for the above quotation, and yet all differ in reproducing More's spellings. Marsh differs in about twenty cases from Eastwood and Wright* whom I have followed, not having More's works complete. Tooke differs from them in about as many cases, but chiefly in the use of capitals. Sir Edmund Head, in his chapter "On Certain Affirmative and Negative Particles of the English Language", quotes Tooke's quotation, but fails to reproduce it accurately. Latham, on p. 528 of the second edition of his English Language, and in the third volume of his Johnson's Dictionary, quotes the passage from the second volume of the Philological Museum. These quotations differ from each other as well as from those of Tooke, Marsh, and Eastwood & Wright.

There is evidently a misprint in More's Works where I have

* They begin the quotation with the third sentence. In the first two sentences I have followed Marsh.

inserted in brackets *nay*. Marsh does not seem to consider it so, but rather as a mistake made by More on account of the subtle character of the rule. He considers that it is remarkable that Tooke, Latham, and Trench did not notice it. Attention was called to the mistake, either author's or printer's, by Sir E. Head before the appearance of Marsh's Lectures.

Marsh says, in reference to the doubts that have existed as to whether the distinction made by More ever existed, that it is "certain that the distinction was made, and very generally observed, from the end of the fourteenth century to about the time of Tyndale and Sir Thomas More, soon after which it became obsolete. See Marsh's Lectures, pp. 578–584; Trench's Study of Words (9th edition), New York, 1855, p. 172; Müller's Science of Language, First Series, p. 225; and DeVere's Studies in English, pp. 326–7.

W. D. HENKLE.

Salem, Ohio.

TOM TUDOR'S DIARY.

Nov. 15, 1871. Well, Old Journal, we are fairly located, and prepared for a winter's work on the Western Reserve; and hard work, too, if I am to judge from the looks of this old school-house, with broken windows, shattered stove, and dilapidated chair. They surely must have been unfortunate in their choice of a teacher last term. If the teacher could not preserve order, why did not the directors stop the school, before the school-house was half torn down; for I read in the School Laws of Ohio, a copy of which Mr. Reed lent me last evening, that the directors may do this, on proof that the teacher fails to govern the school properly. But I shall like the school here, for the school laws are better than those of "Old New England." Yet who ever saw such dilapidated school-houses in Vermont, as those which I have seen since I left the railroad station at Plainville? If I were teaching in Vermont, and should allow my scholars even to mar the newly painted desks and doors with pencils, chalk, or charcoal, I should expect to loose my "stewardship", and never be able to get another. I shall have the directors repair the school-house at once. But here come the children, and I must be at my task.

Nov. 29th. Two weeks of school are passed, and not without their cares, trials, and, shall I say, discouragements? No! A district school teacher should never think of discouragement;

he should always work patiently, trusting and hoping that by His grace the seed sown in young minds may *sometime* spring up and bear good fruit. The school-house is not yet repaired, though Mr. Jones, one of the directors, says: "I'll try and fix it up some day, when I can't haul wood." If it was a stable for his thorough-bred Durhams and Ayrshires, instead of a school-house for his children, it would have been made warm and comfortable long ago. I wonder if the people here ever saw or imagined such cosy schoolrooms as many districts in New England have; always neat and clean, with desks either grained, or painted, and varnished, and nicely papered walls, adorned with a few choice chromos and engravings, furnished by scholars and teacher?

Jan. 8th, 1872. School just half done. Why don't the parents take an interest in their children's education? They love their children, doubtless, but because they fail to see the advantage which education has over ignorance, they seem to care little for their advancement in their studies. When, during the first two weeks of school, I sent my invitations to parents and others to visit us, I was surprised to find that only two young ladies and one young man cared to visit the school; and, since then, not a parent has called on us. Of course, the directors will call, for among the laws, which they have sworn to support, is one which provides that "the directors or one of them shall visit the school at least twice during each term."

January 16th. To-day has seemed more like a succcessful school than usual, for I had eighteen scholars at the opening of school. Though my roll-call numbers thirty-four scholars, the daily average attendance has been only fourteen, and, of that number, at least 75 per cent are tardy, I tried to make them come earlier, but they say that they can't get their breakfasts in season; and so the whole blame seemed to rest with the parents, who, through indifference, allow their children to be absent during the holidays, and tardy at all times. Could they see, as I do, the worthlessness of the term, to those who are so often absent or tardy, they would bend every energy to remedy the evil.

March 3d. The term is closed, and a mountain is lifted from my shoulders. Has the term been a successful one? I have tried to do everything which I knew would benefit my scholars, but, to most of them, it has been a failure, simply because they would not be punctual and would not study hard. To the few,

who saw the advantages of school, and improved them, it has been well-spent time. *They* have done nobly. I was disappointed in my school examination on Thursday of last week. Our studies had been reviewed, invitations had been sent to all parents and others who were interested, to be present, and everything was ready, when, behold! a theatrical troupe arrived in the village; and not only the parents but also half the scholars went to the show! So I close my school without receiving a call, even from the directors. The success of the term looks, on the whole, rather doubtful; but I have at least created in those who *were* interested, a desire to learn the common branches thoroughly, before rushing to algebra, philosophy, etc., in proof of which fact let me herein make record, that we have studied our *spelling-books* till we have challenged and gloriously overcome all other schools in the township, in a spelling-match!

Nov. 9th, 1872. Once more at work in the old school-house; for my scholars insisted that I must be the teacher. I little thought last winter, when they called me "strict" and "cross", that they would want me another term. Experience has taught me wherein I may improve the school and the other schools in the township, and I have already taken two bold steps, in the path of progress. By earnest pleading I have persuaded the township board of education to do their duty, by ordering the use of certain specified text-books, *and those only*, in the schools. Now as the imperfect books are thrown out of use, and the number of classes is decreased, the increased size of the classes, and the extra time for each recitation, make it more interesting and beneficial to all. I have also revived the interest in spelling, by giving evening spelling schools, and persuading other schools to do the same, making each school free to all schools in the township. The scholars are much excited, and have already raised a fund to buy a school bell, to be placed on the house of the school which shall win it in a spelling-match during the last week of the term.

March 4th, 1873. Our second term has closed with the evidence of progress in many directions. The pupils have been more punctual and regular, the lessons have been better prepared, two or three parents visited the school, and one director actually sacrificed a half-hour in the schoolroom! The closing examination was quite well attended. The bell was fairly won by my pupils, and is on the old school-house. TOM TUDOR.

SHOULD AMERICAN YOUTH BE EDUCATED ABROAD?

American and European schools have their distinctive excellencies, and can each learn much from the other. Of late the schools of Prussia have been over-praised. Though justly lauded by Horace Mann, Prof. Stowe, and others, thirty years ago, they do not retain the same preëminence. Relatively there has been greater progress in some other lands.

The Prussian system, though of acknowledged excellence, is in some measure stereotyped. A just pride in the laurels won now tends towards satisfaction with past achievements. Such complacency does not foster that spirit of progress and improvement so conspicuous in Austria and America. The commendations, well deserved in the days of Dinter, no longer belong exclusively or specially to the Prussians. Stimulated, indeed, by their illustrious example at the outset, others have overtaken them in the race. These remarks apply to their public school system rather than to their magnificent universities and other higher institutions, which open opportunities for the broadest culture to the graduates of our colleges, especially to those in training for professorships, with fixed principles, studious habits, and disciplined minds. For the want of these requisites, many American students fail to receive substantial benefit even from the German universities. Inadequate preparation and application make these grand lecture courses comparatively worthless to them. Such passive absorption is not the true process of education. But aside from the universities, the so-called golden opportunities of continental culture have been greatly exaggerated. For our youth, American schools are better than European. To send our boys and girls away to a foreign boarding school is a great mistake—or rather one of the fashionable follies which is just now having its day. With fashion one cannot reason. I do not object that this fashion is costly in money, for that is one of its attractions; but costly in what is worth vastly more than gold, viz., character and practical culture. This fashion of to-day experience and a wiser self-respect will surely rectify when the comparative results of the two systems come to be the better understood. The fond hopes so often wrecked in foreign lands will, at least, serve as beacons in the future. It is not in France alone that a moral malaria pervades the atmosphere. The example of other cities

besides Paris and Naples refutes the plausible but pernicious aphorism of Burke, that "vice loses half its evil by parting with all its grossness." In these luxurious centres a voluptuous refinement veils the grossest immorality under simulations of delicacy, if not under the sanctions of law, and licenses vice herself, if only robed in the semblance of propriety. A thin veneering covers the foulest corruption. To offend against taste is worse than to break the ten commandments, and vice has less to fear than vulgarity.

If parents accompany their children, and still surround them with the restraints and inspiration of home, these objections are mainly obviated. The great advantage of foreign travel, I freely admit. Personal observations abroad may happily supplement the school, remove narrowness, and stimulate the desire for knowledge. There is some sense in the old saying, "Drill a child thoroughly in the elements, and then set him on a horse and trot him round the world."

In the German schools the course of study is so unlike ours, the subjects and methods so peculiar, and the processes so slow, as to weary, if not disgust, the American boy. To him the school rules seem odd, if not arbitrary. Many American boys I found there ill at ease, if not discontented, grumbling, and homesick, because, they said, these strange methods are not so well fitted to serve the practical ends of life, and meet the conditions of success in America.

In philological studies and researches, in the refinements of art, in music, and in manners, European schools excel. But this linguistic and æsthetic culture, admirable as it is, poorly compensates for the loss of a more practical training, and for the neglect of our own vernacular and literature too common with our boys educated abroad. These exiles return too often un-Americanized, if not unchristianized. After carefully observing both processes and results, with large numbers educated abroad and at home, the conviction is forced upon me that the thousands of our youth schooled abroad return with an education less substantial than that afforded here, and, what is far worse, with character less matured, even if not impaired. The breadth and art, the elegance and refinement, with perhaps the assumption of foreign airs, or aping of European customs, are by no means the surest conditions of success in the practical duties and stern realities of American life.

It should be remembered, too, that laws, customs, manners,

and institutions educate as well as the school. Like an atmosphere this influence surrounds the child, and unconsciously moulds his character. This element, healthful and invigorating in republics, is repressive in monarchies, where you witness on every hand an obsequiousness to rank, a deference to usage, an unquestioning submission to mere authority, unfriendly to the elasticity, the independence, and still more to the aspirations of the juvenile mind. The gensdarmes standing at every corner is only one of many reminders that there is always near you, or rather over you, the outstretched arm of resistless power. The incentives and methods employed in school government in America are more healthful and stimulating than those found abroad, where school discipline conforms to the prevailing political ideas and is essentially despotic. The military spirit is now dominant and all-pervasive in Germany. The school is one of the appointed agencies of diffusing aristocratic ideas and fortifying monarchical institutions. Education naturally conforms to the prevailing political sentiments. Our system aims at the development, protection, and prosperity of the individual. There the state is always the central figure. With us the government is for the people, as well as of the people. There the people are for the government, and the children are taught that they belong to the state, somewhat as they do to their parents. The juvenile mind, pliant and docile, yields to surrounding associations. Political freedom favors individual independence and manliness. Our youth should, therefore, be educated as Americans, and be well grounded in American ideas and principles. In the knowledge of men and things, in courage and aspiration, in push and energy, in solid utility, in the adaptation of means to ends, Americanism means more than Germanism or any other national*ism*. To profit by the superior scholarship of the German gymnasium, the full course should be mastered, which occupies eight years. A partial course will be but a beginning in many branches, with the completion of none. The American boy needs about two years of preparation, especially in mastering the German language, for he can not catch the spirit of the school while the recitations are in an unknown tongue.

Among the valuable results of such a ten years course may be named: 1. A thorough mastery of the German language, one of the most difficult as well as one of the most important of modern languages. 2. The most thorough training in the

ancient classics, including both writing and speaking Latin, if not Greek. 3. Familiarity with German history and literature, with something of general history. 4. Besides the usual mathematical studies, prominence is given to drawing, music, and "manners." The æsthetic element is carefully developed. Admitting, then, the excellence of this instruction, does it compensate for the want of home influence at this formative period —from eight to eighteen years—when character is largely molded and fixed? Then, more than ever, a youth needs the impulses, the instructions and aspirations that cluster around home, kindred, and friends.

American society and associations—giving a practical knowledge of our modes of thought, intercourse, and influence, are the very educational forces needed by the American student who aspires to lead or control public sentiment. The best training for public life in Germany is not, of course, the surest promise of success here. For American boys, German history is disproportionately prominent. As in the study of geography, they wisely begin with the school-house and then the city or village where they live, and build up all the world around that centre, so all the historical world revolves around Germany as the centre. In connection with this thorough study of their own annals, love of country is most thoroughly and ably taught in German schools.

These manifold agencies, to a remarkable degree, develop the noble sentiment of devotion to fatherland. But the patriotism there taught is so intimately associated with loyalty to the king, that it is inoperative on American boys. Discarding Cæsarism, these inculcations of the duty of homage to the emperor, and of the doctrine of the divine right of kings, are foreign to him. The real truth, so much better than regal assumptions and royal prerogatives, he does not learn, and so the ties are not formed that should bind him to his native land. Constantly hearing laudations of monarchical governments, and disparagements of free institutions, the youth, exiled at ten years of age, do not learn to prize their native land. The magnificent architecture, the grand libraries, art galleries, cathedrals and palaces, the museums, monuments, and triumphal arches, the zoölogical and botanical gardens, impress their tender minds with such a glamour that they come into unconscious, if not avowed, sympathy with this depreciation of their own country, and are virtually de-nationalized.

The experience of American colleges is believed to be nearly uniform as to the superiority in the qualification ef candidates trained at home over our youth prepared for college abroad. The number of the latter class is relatively small. But the instances of eminent success, either in college studies or practical life on the part of American boys chiefly educated abroad, are rare and exceptional.

It is plausibly said that our girls and boys are usually educated abroad in private boarding schools specially adapted to foreign youth. While there are some excellent schools of this kind, there are many others superficial and pretentious. The public schools of Germany are greatly superior to their private institutions. An eminent American author, with the best opportunities of observation, says: "There is no end to the swindling and pretence on the part of boarding schools in France and Germany." Says another, "My boy was swindled out of ten years' progress in a boarding school abroad." A prominent gentleman in Washington now acknowledges "results prove that sending my boy three years was unwise." An artist whose tastes and business favored his continuing abroad, where he had spent six years, and became thoroughly acquainted with European methods of education, says: "I have returned to America for the sake of my children." Similar experiences might be multiplied.—B. G. NORTHROP *in Christian Union.*

ONE WEEK IN A PRIMARY SCHOOL.

(*Concluded.*)

It had been the practice of the teacher to interrupt the ordinary routine of recitation when visitors were present, and take up something which would *amuse* them! Singing, marching, physical exercises, declamations, juvenile attempts at oratory,—anything that would create a smile, make the children appear pretty and cunning, was introduced to beguile the fond papas and mammas into the belief that their children were prodigies of learning, and the teacher one of the most perfect beings in existence! Besides fostering a false pride in the parent, such a coarse produces a counter reflection in the mind of the child. The teacher's motives are only too plainly discernible by their

pure, susceptible spirits. Only too soon do they learn their "role" of duty, and the part they are expected to play before their friends and companions, and, as a consequence, a lesson of deceit is given, which can not be otherwise than lasting.

It is a mistake for the teacher to allow the entrance of company to interrupt the regular work of a school. Visitors should enter—no matter when—without knocking and with the understanding that the usual order of exercises will be continued. Let the teacher proceed with the reading and spelling and the general exercises, and, if her heart is in the recitations, they will not fail to be interesting and attractive.

Another grave mistake had been made in the public examinations. It had been the teacher's custom (too general a practice, of late, in our schools) to spend a great part of the time in rhetorical exercises, theatricals, dressing, etc., and the real examination—the testing of the true work of public schools—had been placed decidedly in the background.

These observed faults prevail in many schools, and the result is, that parents visiting the schools pay little attention to the reading, spelling, and other common branches. If it is understood by the public that the examinations are to consist entirely of recitations, few will attend, as these exercises are not considered *interesting* by parents. The schoolroom must be turned into a theatre, with its usual accompaniments of dress, music, scenery, etc. The responsibility of this evil practice rests not only upon teachers, but also upon the public. Its folly lies with the fond papas and mammas, whose principal desire is to see "Master Ned" (who, of course, is expected to make a *future president*) dressed up, and paraded before an audience, that all may see the COMING MAN!

Much has been said in our educational journals to impress upon parents the duty of visiting schools, but, if to secure this, the teacher is compelled to get up a theatrical performance for their especial edification, of what benefit is their presence to either teacher or pupil? How much do our schools gain by such visits? What knowledge do the visitors obtain of the real workings of our school system? How much do they learn of the progress of the pupils in the several branches of study? Of the teacher's methods of instruction? Of her system of conducting general exercises, and her habits of questioning? Do they know whether she is pleasant, kind and genial, full of love for her work? In fact, when the schoolroom door closes

upon their retreating forms, and the weary, pale-faced girl, whose heart is heavy under her load of responsibility, draws a long sigh of relief, have they gained one single idea of the work of the teacher or the progress of the pupils, or the least insight into the general management of our school system?

What is the object of our public schools? Is it not to train the mass of our American youth in such a way that they may know and practice the true principles of self-government? Is it not to give the common people a good common school education? And are not reading and writing and spelling the ground work, the chief corner-stone of the whole superstructure? And should not these receive the first care, the most thought, and the highest effort of the teacher?

True, there are many things which, if rightly introduced, will serve to relieve the tediousness of the schoolroom, and make school life more attractive to the young student. We would not decry these aids to school work: they have their place and season; but we do claim that the chief time and labor should not be expended upon non-essentials; that the essentials should not be passed over carelessly, in order to gain *time* for practice in some more *artistic department.* Gymnastics, physical exercises, music, are all pleasant and useful. Music elevates and refines the soul; physical exercise promotes bodily and mental vigor; and both should receive attention. To make them unduly prominent, is an error which should be resisted by teachers.

Three Rivers, Mich. SARAH C. STERLING.

HINTS FROM PRACTICE.

Monthly Examinations.—We find monthly written examinations as much of a necessity as the compass is to the mariner. Classes may drift from the track. The work may be imperfectly understood by the pupil, and the teacher may not know it. These examinations disclose the true condition of things as nothing else can. They are more of a necessity to the teacher than to the pupil, if he would do thoroughly honest work. Examinations make work, and some teachers would shirk them on that account. Teachers do not spend more than six or seven hours in the schoolroom per day. They should make

the time up to eight or ten hours out of school, as other employes do. While some would shirk, others do their whole duty, and sometimes go to the extreme of overwork.

Written Reviews.—We find that a semi-monthly written review of our classes is a most valuable aid in our work,—taking only the time of preparing and reciting a recitation for it. This prepares for monthly examinations; takes a new reckoning. This review is conducted by the teacher for her guide for the month's work.

Written Recitations.—Unless care and attention are given to oral recitations, there will be much looseness in answers, much taken for granted, much indirect aid, etc. Written recitations will put pupils upon their own resources, and frequently reveal to the teacher better methods of oral recitation. Our regulations require "at least one written recitation, review, etc., per week." This requires work, but it can be done in less than *ten* hours per day. It may take eight; it ought to take that much.

Reports.—We do not make monthly reports to parents. Some appreciate such reports; many do not. It requires much labor on the part of the teacher that can be better employed. When a pupil falls below the required standard of 80 per cent, parents are informed of the fact by filling out a blank for the purpose, stating that the pupil will fall into the class of the next lower grade unless the parent will assure the teacher that one hour per day out of school will be spent upon the study in which there was a failure, preparatory to a reëxamination. The pupil who has failed, is required to hand to the teacher each morning a written statement of the time studied and the particular subject studied until reëxamined. This does not take much work in practice; but with written lessons, written reviews, thorough work, and fair examination-tests, few need to fall below the standard. If, after all, pupils fall below 75 per cent, they should be put back without further trial,—except in special cases when no general rules can apply,—subject to the common sense of the teacher. G. N. C.

THE first condition of success in conducting a recitation is a thorough mastery of the lesson to be recited. The teacher's knowledge must not only be thorough but fresh, and this requires special daily preparation—a preparation wider than the text-book used by the class.

THE TEACHER'S KNOWLEDGE.

A teacher whose acquirements are limited to the text-books he uses, can never achieve real success in conducting his recitations. "A good schoolmaster", says Guizot, "must know much more than he is called upon to teach, in order that he may teach with intelligence and taste." It is a question worthy of consideration whether the ambition and love of study inspired in a class by a scholarly, skillful, and enthusistic teacher are not worth more to the pupils than all the studying they are able to do. What is more contagious than example? What is more glorious than a noble example as an inspiration to worthy deeds? The teacher who does not show that he can go beyond the text-book in his search after truth, and enrich the knowledge which his pupils have acquird by copious additions to it from his own well-furnished storehouse, is lacking in the first element of power in his great work. This is, in fact, one of the true secrets of power in teaching. It secures the confidence, it arouses the interest, it commands the respect and admiration of the class, and supplies the most needful conditions to its progress. Hence, let the teacher ever go before his pupils in the class room full of his subject, all aglow with its spirit, ready to meet every difficulty, to answer every objection, and supply every omission which may arise in the course of the sharp drill that is to follow.—*Minnesota Teacher.*

No less important than a resolute, sincere purpose, is an intelligent preparation for the work of teaching. One great defect in our teachers is, that they are too much inclined to avail themselves of the appliances by which teaching is made easy. Nothing is more fatal to good teaching. Let the teacher make use of text-book, manuals, and the like, to simplify tasks for his pupils, as far as he thinks judicious, but he should train himself to an absolute independence of them, rather than any easy use of them. An intelligent teacher will no more lean upon such supports, than a well man will walk with crutches. The best remedy for this trouble would be the providing of higher instruction for teachers. Am I unjust in saying that even the normal schools are not up to the needs of the time?—*Professor Agassiz.*

EDITORIAL DEPARTMENT.

—— Prof. Young's papers on the school system of Baden have been highly and justly commended by several of our exchanges. They are certainly very clear and comprehensive. No intelligent person can read them without obtaining some definite knowledge of one of the oldest and most efficient school systems in the world. We call special attention to the paper in this number. Prof. Young is right when he states that such uniformity of classification and grading is only attainable under a compulsory system. The attendance must be regular and continuous. The attempt to keep pupils who fail to pass the examinations for promotion, one or two more years on the ground gone over in the year, needs forced attendance to make it successful. The result under the voluntary system is, that most of the pupils who fail to pass, drop out of school. The more procrustean and exacting the demands of the voluntary system, the fewer the pupils who attend school. A perfect school mechanism grinds admirably, but the grist is too small.

—— We also call attention to the two courses of study in the Baden schools—a short course and an extended course, the former being arranged for working children who can attend school but a part of each day. The short or "simple" course prevails in rural and village schools which are organized on the half-time or, more properly, the part-time system. We do not think that this plan would work as well in the rural districts in this country as in Baden. Our large farms and sparse population place children too far from school, and, besides, the severe climate of the more northern section of the United States forbids much profitable farm work in winter. The four or five months, ending about the first of April, are the most favorable time for the older children of farmers to attend school, and they need to make the most of this opportunity. The half-time system might, however, be adopted with advantage in the lower schools in our villages and cities, and, as we suggested last month, *a half-time course should be added to the present full-time course in the upper grades.* What is needed is an earnest effort to adapt our schools more fully to the condition and needs of the people, and especially of those who now receive but little schooling. The flexibility of the Badish system is specially noticeable. It aims to meet the industrial necessities of all classes.

—— Two of the defects observed by Miss Sterling in her week's experience in a primary school, are much too common, especially in schools where the "word method" is unskillfully used. When children are first taught words as wholes, and then read sentences and paragraphs *after* and *in imitation* of the teacher's reading, in concert and individually,

it is not strange that their reading is really reciting, or *repeating*, and that they reach and even complete the second reader unable to make out a new word or to name separately many of the words in the lessons read. Children may be readily taken through several readers in this way, and they may read the pieces to the admiration of committees and visitors. But give the pupils an entirely new piece, and their blundering will astonish those who do not know the cause. The reading of sentences in a primary school should be preceded by a mastery of the words, including their recognition at sight, their spelling by sound and letter, and their meaning and use. The pupil should also be so taught that he may determine new words. But more on this subject at another time.

—— We have often borne testimony against the theatrical folly which our correspondent so justly condemns. A public examination should exhibit the true and legitimate work of a school, and no exercises should be introduced which do not represent this work in some department. All sensible people know that theatrical performances, with stage trappings and dress, are foreign to the purpose of a school, and a resort to such "side shows" to entertain visitors, is, we think, a great mistake. It not only diverts attention from the real object of an examination, but the preparation required and the unsettling of the pupils by excitement involve a serious loss of time with no compensating gain. We also question the propriety of a teacher's making an exhibition of *what he does not teach*. A very indifferent term's work may be made to close triumphantly by a display of showy exercises, specially prepared for the occasion, but such attempts to create a false impression do not, in the end, pay. A school exhibition should show the results aimed at and attained by the regular school exercises. It is, of course, admissible for the teacher to give due prominence to those exercises which are most attractive and interesting to a popular audience.

——Secretary Northrop, of Connecticut, is doing a valuable service in calling public attention to the folly and danger of sending boys and girls abroad for an education. The facts which he so clearly and boldly states, are attested by the sad experience of many American families. The fact that European society is monarchical in its usages and spirit, is sufficient evidence that it can not be favorable to the development of a true republican character; and the very refinement and glamour of its immorality and vices have a seductive and pernicious influence on American children—especially those who have wealthy parents. There is also no doubt that American schools give a better preparation for American life and duties than the schools of Europe, notwithstanding the admitted superiority of the latter in several important particulars. The American school is pervaded by the earnest spirit of American life and morals, and what it lacks in linguistic and æsthetic culture, is more than made good by its intellectual vigor, practical bearing, and healthful incentives. It is admitted that Europe offers superior advantages to young persons of

education and established character, who may wish to pursue certain special studies, but we hope the time may soon come when no American will find it necessary to go abroad for such scholastic advantages.

—— SECRETARY WHITE, of Massachusetts, calls our attention to the incorrectness of the statement in our February number (p. 61), that "It was not until 1808 that the laws of any New England state recognized the fitness of woman to be a teacher in the public schools." He sends us a copy of section 9 of chapter 19 of the act of 1789, with its preamble, which shows that while the employment of women in the schools *required* to be maintained by the previous sections of the act, was not authorized, they were *recognized* as competent to teach the schools described in the preamble, which were of the same grade as the required schools. The preamble and section are as follows:

"Whereas schools for the education of children in the most early stages of life may be kept in towns, districts, and plantations, which schools are not particularly described in this act; and that the greatest attention may be given to the early establishing just principles in the tender minds of such children, and carefully instructing them in the first principles of reading:—

"SEC. 9. *Be it enacted*, That no person shall be allowed to be a master *or mistress* of such school, or to keep the same, unless he *or she* shall obtain a certificate of such town or district where the same may be kept, or the committee appointed by such town, district, or plantation, to visit their schools, as well as from a learned minister settled therein, if any such there be, that he or she is a person of sober life and conversation, and well qualified to keep such school. And it shall be the duty of such master or mistress carefully to instruct the children, attending his or her school, in reading (and writing if contracted for), and to instil into their minds a sense of piety and virtue, and to teach them decent behavior. Penalty, forty shillings."

Mr. White adds that this act is interesting as showing that it was "the right and duty of the state to prohibit any person to teach a *private* as well as a public school, who had not obtained *due license* therefor—a principle of public action which the present generation has quite lost sight of."

—— WE have never felt disposed to criticise our educational contemporaries. Many, perhaps most, of the school journals of the country are edited gratuitously by persons who have full employment in other directions. Their editorial labor is performed in the few hours which can be snatched from other urgent duties or from needed rest. It is not surprising that journals thus conducted are comparatively weak and lean. The surprise is, that they are as good as they are—a statement that will be most appreciated by those who know from experience how much time it takes to edit an educational journal. To "keep posted" on educational questions and movements, is but one item in the editor's preparation for his work. While we feel more like encouraging than criticising those of our editorial brethren who are making personal sacrifice to promote the good cause, we are tempted, at times, to expose the false claims and assertions of two journals which seek thus to enhance their importance and success. In these journals we have recently noticed several statements which can be believed by no one who has had experience in educational journalism. Such pretensions may possibly deceive the simple, but they forfeit the confidence of those whose good opinion is of higher value than gold.

—— A "Newark Teacher" informs us that the New Jersey law forbidding corporal punishment in the public schools, does not apply to the cities. He says that it is the opinion of those who control the city schools that the law would result in harm in the cities, though all agree that the rod should be used very sparingly. Supt. Henry Kiddle, of New York City, believes that the increase of absenteeism in the schools is the result of the experiment of exclusive "moral suasion", which has been tried for two years. He recommends re-investing the principals "with the right to inflict, under proper regulations and restrictions, corporal chastisement upon those pupils who show themselves amenable to no other influence." He urges that whatever means it would be right and necessary for parents to resort to in the government of their children, it is equally right and necessary for teachers to employ. He regards the failure of the schools to retain and control the very children from whom the community has most to fear, an evil which threatens to undermine the school system. Whatever may be true of the necessity of corporal punishment in public schools, experience seems to indicate, as we stated in our January editorial, that it is not wise to enact laws positively forbidding any resort to it. Such laws increase the difficulty of governing by milder measures. "Moral suasion" is most potent, when the *power* to use the rod lies back of it. Besides there are teachers who can not maintain necessary discipline without occasionally resorting to force or expulsion—and the latter should be the last resort.

—— CATHOLICS are generally opposed to the enactment of laws compelling school attendance, claiming that such laws violate the essential right of parents to give their children a religious education. The *Catholic Telegraph*, of Cincinnati, thus announces what its counsel will be, if the state adopts the compulsory system:

"Catholics will not have to wait long for advice from us. We shall admonish them to protect their children from the hell that yawns for them, by the physical strength which God has given them. We shall teach them that it can be employed in no holier cause. We shall encourage them, if necessary, *to slay upon their threshold* the official that comes in the name of any such law, to destroy the souls which they are bound to protect at the cost of their own lives."

Inasmuch as no one advocates the enactment of laws compelling children to attend public schools, this prospective admonition seems a little ludicrous. All the compulsory laws yet enacted in this country, and all that have been drafted or advocated, simply require children to be sent to school, parents being entirely free to determine what schools they will patronize. Every Catholic is at liberty to send his children to Catholic schools. We fail to see how such laws interfere with the religious rights of parents. We are not an advocate of the compulsory system, having too little faith in its enforcement in this country; but the power of the state to resort to compulsion is clear. Every child has the right to an education, and no parent has the right to doom his child to a condition of ignorance. The right of the child is paramount to the authority of the parent. Whatever knowledge in the citizen is necessary for the security of the state, the state has the right to enjoin. We hold these propositions to be fundamental truths.

——THE *Cincinnati Gazette* of March 14th contained an editorial advocating, if we understand its purport, an abandonment of our present free school system and a return to the miserable English pauper system, as it existed in Virginia some twenty years ago. If the *Gazette* had any expectation that its views would be adopted or even approved by the American people, its repeated attacks on the public school system would deserve an answer. The advocacy of the exploded educational views of the Tory writers of England, is certainly a strange procedure for a leading Republican paper of Ohio.

THE MANAGEMENT OF TEACHERS' INSTITUTES.

A late number of the *Pennsylvania School Journal* republished a paper on teachers' institutes, which suggests that the work should be done by "our own teachers"; that the roll should be called in regular order, and that each teacher should be compelled to respond with an essay or a lecture, the former being limited to five minutes and the latter to ten. The writer objects to imported talent, because "corn will not grow in the shade." He insists that teachers must do the work "if they want to derive the benefit."

If the writer had aimed to devise a plan to make institutes as nearly worthless as possible, he could not have succeeded much better. But without wasting words on his impracticable suggestion, let us glance at the principle on which it is based—an error that is responsible for much valueless work in the institutes of the country. If a teacher must read an essay, or deliver a lecture, or make a speech in an institute, in order to receive any benefit, it is plain that the benefit is not in receiving but in imparting, and hence the time spent in listening to others is wasted. If this be true, no teacher need be present except *when he has the floor!*

It is doubtless an advantage to an inexperienced teacher to prepare an essay, lecture, or speech for an institute, but what is his gain may be loss to those who listen to his effort. We have attended institutes where most of the time was devoted to essays, lectures, and discussions by the members. The result was, that, while a small minority of the teachers had "participated" in the exercises, the great majority had received very little professional assistance. They returned to their schools with very few new ideas or suggestions. We have often heard intelligent teachers complain, because so much time was consumed by those who had nothing of practical value to present.

The truth is, that only one instructor can occupy the attention of an institute at a time, and the important thing is, that he be competent to profit those who listen to him. It is the good of the *listeners*, and not of the speaker, that is to be considered. There are always a few ambitious teachers in every institute, who are anxions to be heard, and it may be well to give them a chance. This may be done in the discussion of practical topics and in the answering of questions submitted to them.

We have found the "Query Box" an excellent relief to pent-up ambition. A resort to formal essays and lectures involves too serious a loss of time. There are usually a few teachers in every county, who can give a practical lesson, conduct a class-drill, or even deliver a lecture to the edification and profit of an institute. It is well to use such home talent.

The first institutes which we attended in Pennsylvania, were a surprise to us. The programmes were arranged to interest and amuse a popular audience. Lectures and essays, on all sorts of subjects, elocutionary performances, and musical entertainments, left little time for professional instruction. We have listened for nearly three hours, first to a long essay, say on "Ambition", next to a longer lecture by a local celebrity on "Ancient Ruins", followed by an elocutionary display, and then we have been asked to crowd a lesson on an important professional topic into twenty minutes! Most of the time was wasted on exercises which had no practical bearing on the work of the teacher. It affords us pleasure to add that we have observed a marked change for the better in the Pennsylvania institutes. County superintendents are more and more recognizing the fact that the teachers need practical assistance, not mere entertainment. We have attended several institutes in the state in which the exercises of the day sessions were almost exclusively professional. This is the true idea.

It seems to us that the time has come when the teachers' institute should enter on its distinctive work. It is neither a convention nor a literary exhibition, and it is no longer necessary to make it popular by exercises entirely foreign to its great object—the professional improvement of teachers. The hours of the day sessions should certainly be filled with lectures, class-drills, and other exercises which bear directly on school organization, management, and instruction. The exercises of the evening sessions may very properly be of a more popular character; and this will be found necessary when an admission fee is charged to meet the expenses of the institute. The sparkling essay, the literary lecture, the elocutionist's art, and the choicest music may be used to interest and delight the audience.

While no part of the evening sessions should ordinarily be devoted to professional instruction, we see no reason why educational topics should be excluded. There are no questions of greater general interest than those relating to education, and none which more fully meet the conditions of a popular lecture. It is, moreover, very important that the great educational issues of the day be discussed before the people by the ablest speakers of the country. Public interest and confidence in the schools will thus be increased, and the school system will be still more strongly fortified against the assaults of its enemies.

But we see that our pen has run away from our purpose, for we intended to write but a brief paragraph on this subject. We wished simply to bear testimony against the foolish idea that the work of an institute should be done by its members. An institute thus conducted is just about as efficient as a school in which the pupils successively act the teacher. An institute should bring to inexperienced teachers the ripest experience, the best methods, and the soundest views of the profession.

MORAL INSTRUCTION IN PUBLIC SCHOOLS.

Without entering into the question of the origin of moral distinctions, we assume that there is in every child the power of distinguishing between right and wrong. That this is an intuitive power, we have no doubt, and exists independently of any knowledge of the utility of right action, which the child may acquire. The moral faculty in a child may be cultivated, and must be. Many of the studies in public schools have a direct tendency to aid such cultivation; while others, such as mathematics, present nothing to the mind possessing any moral quality.

Whether the moral sense should be cultivated in schools directly, or by indirect methods, is a question of no little importance. We see no good reason why this may not be a direct work, entered upon consciously and intelligently by the teacher. Generally, as a matter of fact, there is far more of this direct work of educating the moral sense done with younger children in the lower departments of graded schools than with older scholars in higher departments, and much more of this work is done by female teachers than by men. This follows the analogy of the home or family life where the mother has usually far more to say to her child as to right doing or wrong doing than the father. As the child grows older, the father calls attention to the consequences of actions, and the influence of this or that course as bearing upon his future usefulness and success. The mother is, perhaps, not unmindful of the utilities of virtue, but led by her quicker instincts and by her greater confidence in the power of the fundamental distinctions between right and wrong, she ever urges these distinctions upon her child. The influence of her teachings, considered as a moral safeguard, is far greater than the more utilitarian instruction of the father. In schools the female teacher seldom hesitates to declare of an act that it is wrong, and she often uses the stronger word, wicked. She more freely resorts to sanctions drawn from religious sources, and speaks to her pupil of God's approval or disapproval of his conduct. Of course such reference implies that the child must know something of God and of His will. Whether such knowledge should be imparted in the school, or be left to parents and religious teachers, is thought by many to be an open question. That such knowledge is useful in the moral training of the young, will hardly be denied. The state, no less than the school, both needs and uses such knowledge. For example, throughout all Christendom the fact is incorporated in the laws and usages of all civil society that men are more truthful when they make their statements under the sanction of an appeal to God to listen to their statements. In all matters pertaining to the interests of persons and property, every man, woman, and child, who makes a statement before any authorized tribunal, is expected to do it in the very hearing of God. This implies and necessitates some knowledge of the character of such an august listener. Whether the imparting of such knowledge should be left to precarious means, as, *e. g.*, to parents, many of whom neglect such instruction altogether, and, indeed, sometimes even teach their children to blaspheme the name which the state re-

quires to be held sacred, or to the religious instruction of churches which does not reach but a portion of the population, is a question of very deep interest. It is very certain that the state can have no just cause of complaint, if the teacher, who may justly wish to use the same knowledge of God in the moral training of children, should, when needed, supply the deficiency of parental or other instruction. It is, indeed, knowledge beneficial to the state as well as to the child, and which the state may afterward freely use. As to the means by which such knowledge may be imparted, we shall not now enter into any discussion. It is enough to declare, that, *in some way*, all children should receive what the state ever assumes them to possess, and may, at any time, require them to use and use rightfully under pain of the severest punishment.

In the light of these considerations, no teacher should fear to use, in the moral training of the child, the appeal to God's approval of truth and right, and disapproval of their opposites. The state recognizes, not only by the oath, but in various other ways, truthfulness as lying at the foundation of society. We venture the statement that forty-nine out of fifty of the teachers of our public schools believe in the existence of God. The propriety of these teachers' referring to such a Being, in the work of impressing moral lessons upon the minds of their pupils, does not depend upon any special religious or ecclesiastical views. The oath of office has been equally impressive and binding whether administered to presidents by Chief Justice Chase, a Protestant, or by Chief Justice Taney, a Catholic. With teachers there is needed simply a manly or womanly use of this truth, which all believe, in impressing moral instruction upon the minds of their pupils. Any squeamish timidity is as plainly out of place with them as with a civil officer who makes official reference to a Supreme Being in order to secure high moral ends. Both means and ends are honorable, and they mutually sanctify each other.

If in the mind and heart of every child in school there is laid the basis of truthfulness in word and life, the larger part of the work of forming a moral character is performed. Morality strictly consists in obedience to the conscience, and where the conscience is, by the best culture, rendered sensitive to every dictate of duty, and the determination is formed in the mind of the child to be ever true in word and life to such dictates, we have the highest form of moral character. Such a character must ever take precedence of a merely intellectual character. Our age is becoming more and more utilitarian, and even virtues are largely prized for their utility. Honesty is said to be the best policy, but when a man thinks it poor policy, nothing can restrain him but the fear of law. True honesty has its roots in the eternal principles of right. If, on the other hand, honesty or dishonesty are merely matters of policy, every man may determine his own policy. In this age of greed of money, all things are too often rendered subordinate to gain. Education is too often prized as a means of obtaining wealth rather than as aiding to form a true and manly character. Science is chiefly honored as a means of securing material wealth. There is, therefore, no duty of the teacher more imperative and sacred than that of resisting the incoming tide of greed of gold which now seems well nigh irresistible in its power to ob-

literate moral distinctions. To form a high moral character strong enough to resist every assault of temptation in private or public station, there must be introduced into the mind of every youth high moral tone and sensitiveness of conscience as his great moral endowment, and such conscience must be taught to act from principles within and not from influences from without. It must be his own private, individual conscience, and not a fragment of the so-called public conscience, which ever fluctuates with irresponsible public opinion.

How shall we form such consciences, keyed to such high moral tone, in our public schools? In two ways—by direct teaching, and by example. We have already alluded to moral instruction by female teachers. As a general rule, their appeals to the moral sense are more direct than those of men, and they more easily and impressively invoke the aid of divine sanctions. Such direct instruction and appeal to higher sanctions are by no means limited to female teachers, although more characteristic of them. All teachers should be thus direct, and the age in which we live demands it. Happy the boys and girls who through all their school days are under such instruction, and emerge from school life with high principles and habits of moral action, and who habitually ask in regard to every act the great preliminary question, *Is it right?* How far such high moral culture is practically to be obtained in our public schools must depend upon the teacher and upon the place he is inclined to give such culture in his educational system. Independent of any technical or sectarian religious instruction, a teacher may so improve the many opportunities thrown in his way coming from reading lessons, history, and the like, and from his need to decide the many practical questions of morals growing out of school discipline, or, while acting as umpire, to decide between the conflicting wishes or passions of pupils, as to lay such foundations of conscientiousness and moral integrity as shall be a safeguard to the pupil while he lives.

But in addition to this direct instruction and this appeal to divine sanctions, we apprehend that not less moral culture comes from the personal character and example of the teacher himself. If his words and actions are instinct with the spirit of truth and honor, if, as in the case of Arnold, he lives in an atmosphere of perfect candor, he will draw his pupils from every form of untruthfulness and meanness up toward the plane of his own high and generous life. A bad boy in the hands of such a teacher and in the presence of such an example finds that the low atmosphere of deceit and vice is oppressive, and he aspires to some thing better in very self-preservation. His longings for a better and nobler life, stimulated by the personal influence and magnetism of his teacher, grow stronger month by month, and year by year. The good opinion of such a teacher is prized beyond any earthly honor. Under such influence the pupil grows up into a high-toned and manly character. Such a character united with true intellectual culture, is the result which every teacher should aim to secure.

EDUCATIONAL INTELLIGENCE.

——The teachers in Alsace have been denied permission to teach the French language in the public schools, it being Bismarck's policy to Germanize the country as quickly as possible.

——Saxony has passed a law compelling youth whose school advantages are cut short by their being apprenticed to learn a trade, to attend evening schools for a period of three years. The Germans do not seem to share the English fear that an education beyond the merest rudiments will spoil the working classes.

——The Irish University Bill, the defeat of which caused the resignation of the Gladstone ministry, provided for the establishment of a university free of denominational control. It also excluded instruction in philosophy and history.——The London School Board reports that it placed 13,048 children in school during the last quarter by the use of the compulsory power.

——The various bills introduced into the Michigan Legislature to weaken or abolish the county superintendency, have had few supporters. The *Michigan Teacher* states that the opposition has now spent its force, and the system may be regarded "as a fixed fact for an indefinite future." A bill providing for truant officers has been introduced to give greater efficiency to the law compelling school attendance.

——The late English papers bring intelligence of a new experiment at the normal college at Chichester in the training of "ladies of gentle birth" and high culture in the business of elementary teaching—a work which has heretofore been undertaken only by women of lower social standing. The movement has the official sanction of the Privy Council on Education. We also learn that women are preparing to compete for the mathematical prizes of the universities.

——The annual report of the president of the Girls' Normal College of New York City regrets the failure of the late experiment to test the merits of Frœbel's system, and it is recommended that a Kindergarten class be formed in the new model school to give the system another trial. If we understand the nature of the "experiment", whose failure is regretted, it was conducted on principles which made its success impossible. Froebel himself would have failed in such an undertaking.

——The State Board of Education of California has adopted a detailed course of studies for the public schools of the state, which is to be enforced after July 1st, 1873. The schools are divided into four grades, and the lowest or fourth grade comprises four divisions and the second and third grades each two divisions. The text-books to be used are prescribed. Why does not the state "relieve" the different communities of the trouble of electing school officers? The entire "machine" can be run by the state, it being only necessary for the people to pay the taxes and supply the children.

—— The new Cumberland Valley State Normal School, located at Shippensburg, Pa., received official recognition as the "State Normal School of the Seventh District" in February last, and was opened with appropriate exercises on the 15th of April. The building is elegant, commodious, and well arranged—one of the finest school edifices in the country. The school is in charge of Prof. Geo. P. Beard, late of Missouri.——State appropriations have been made to three other institutions, and, before the year closes, Pennsylvania will probably have *ten* State Normal Schools. The state appropriations to these schools now amount to $284,815.12.

—— The city of Omaha, Nebraska, is said to have the finest high-school building in the country. It was erected at a cost of $250,000. The high-school building at Lincoln cost $40,000, and the new building of the State University cost $150,000. The land endowment of the University, if properly managed, will yield a fund of not less than $3,000,000. All departments, now or hereafter organized, are to be open to women on equal terms with men.——Iowa now has a permanent school fund of about $3,000,000, yielding an annual income of eight per cent, which is applied to the education of her youth. By the future sales of school lands this fund will be largely increased.

—— The increasing demand for instruction in the elements of the natural sciences in common schools, makes it important that the subject receive special attention in teachers' institutes. The success of such instruction depends very much upon the adoption of correct methods, and, to this end, teachers need the guidance of those who have made the teaching of science a specialty. In view of these facts, we are pleased to learn that Prof. E. S. Morse, of Salem, Mass., has consented to give instruction in natural history in a few Ohio institutes in July and the first part of August. Prof. Morse is one of the first naturalists in the country and a very popular lecturer. The institutes that secures his services, will be very fortunate.

——Supt. Clark, of Defiance, O., gives the results of a novel experiment to prevent tardiness. He presented to the school having the fewest cases of tardiness in December last, a fine engraving to adorn its room during the succeeding month. At the close of January, the picture was presented to the school having the best record of punctuality for that month; and the same presentation has been made at the close of each succeeding month. The tardy record shows 95 cases of tardiness in December, 46 in January, 25 in February, and 15 in March. During the last three months named, there were but 86 cases against 599 cases in the same months last year. The enrollment for these three months was 543 against 452 last year.

—— Boston has sent to the Vienna Exposition thirty large cases of articles, representing the city schools, including the buildings, fittings, furniture, apparatus, books, etc. Supt. Philbrick has been granted a

leave of absence for five months and will make a tour in Europe, visiting the Exposition.——School Commissioner Bicknell, of Rhode Island, and Prof. Merrick Lyon, of Providence, have also gone to Europe to spend a few months.——Dr. J. W. Hoyt, of Wisconsin, who was one of the United States Commissioners at the Paris Exposition, has been appointed a commissioner to Vienna.——Mr. O. A. Burchard, editor of *The New York State Educational Journal*, has arranged to visit the Vienna Exposition, and give a somewhat detailed account of the educational systems of Europe as there represented. The series of articles will be illustrated. Each number of the *Educational Journal* seems to us better than its predecessor.

——A LATE number of the *London Times* contains the decision of the Governing Body of Winchester College on the case of "tunding" to which we referred, at some length, in our February issue. They censure the conduct of the prefect in every particular. The punishment was not only of "excessive severity", but was inflicted for a "slight offense" on a boy whose "place in the school and in his house" ought to have secured him the exemption he claimed. They do not condemn the principle of "fagging", but declare that the power of the prefects over the lower-form boys should be subordinated to the higher authority of the Masters; that the inflicting of corporal punishment for trifling offenses ought to be prohibited; that any threatened punishment by a prefect must be subject to the alternative of an appeal to the Head Master; and that any enforced examination in the school slang should not be allowed to continue. The Head Master "anticipated" most of these "suggestions"!

OHIO.—We are at last able to announce that the school bill has passed both branches of the General Assembly, and is now a law. We have not attempted to keep informed respecting the numerous amendments which have been made, and so must wait for a printed copy of the law before attempting to give an analysis of its provisions. It is the result of the protracted labors of the school committees of two General Assemblies, extending through a period of nearly four years, and, as might be expected of so long an incubation, the measure is eminently conservative. Every proposed change to which any considerable number of old fogies have objected, has been given up, the chief aim being to codify and harmonize the various school laws of the state, and bring something of order out of long-endured confusion. Notwithstanding the ordeal through which it has passed, the law contains several progressive provisions, and those most familiar with its character, believe that its proper administration will result in a decided improvement in the schools of the state.

THE OHIO AGRICULTURAL COLLEGE.—The trustees of this institution are making an earnest and praiseworthy effort to secure for it an ample endowment. The proceeds of the Congressional scrip will afford an annual income of about $30,000. To increase this a law has been passed giving the proceeds of what is known as the Virginia Military Lands to the in-

stitution. The value of these lands is not definitely known, but it is believed that a considerable sum will be realized from them. A bill was also introduced by Senator Hart providing for the reclamation, appraisement, and sale of all surplus canal lands, the swamp lands, and other waste lands belonging to the state, the proceeds to be an irreducible fund for the support of the institution. The bill passed the Senate, but has been so amended in the House as to exempt the canal lands from its provisions, thus cutting off the chief source of revenue. It is believed that the canal lands, now held by fraudulent titles, would, if reclaimed and sold, yield a large fund. The 277,000 acres of swamp lands will considerably increase the present endowment of the institution.——The work on the new building is progressing well, and the trustees hope to open the college next October.

THE PUT-IN BAY MEETING.—We have already announced that a joint meeting of the Ohio Teachers' Association and the Michigan Teachers' Association will be held at Put-in Bay, Ohio, the 2d and 3d days of July next. The executive committees of the two Associations have been engaged, for some time, in preparing the programme of exercises. Mr. Carnahan informs us that the portion assigned to the Ohio Association will include the inaugural address of the President, Supt. U. T. Curran, of Sandusky; the annual address, by Prof. E. S. Morse, of Salem, Mass., and papers on (1) Methods of Instruction in the Natural Sciences, by W. H. Venable, of Cincinnati; (2) Drawing in Public Schools, by Arthur Forbriger, of Cincinnati; Proper Course of Instruction and Practice for Teachers, by Wm. Mitchell, of Worthington; and Uniform Courses of Study for High Schools, by E. H. Cook, of Columbus. The Michigan committee has nearly completed its arrangements, and the joint programme will be published in a few days. We hope that it will not contain too many addresses and papers. There should be time for the thorough discussion of the more important topics. The Put-in Bay House and the Beebe House will each entertain the members at $2.00 a day. There is every indication that there will be a large attendance, and that the meeting will be very pleasant and profitable.——The annual meeting of the Ohio Association of School Superintendents will be held at Put-in Bay on Tuesday, July 1, 1873, opening at 10 o'clock A.M.

TENNESSEE.—The new school law, recently enacted by the Legislature, has caused much rejoicing among the friends of universal education. It provides for a state superintendent and county superintendents—the former to be appointed by the Governor and the latter by the county courts—and district school directors, three in each district, to be elected the people. The duties of all these officers are clearly and well defined. The permanent school fund, which, with the accrued interest, now amounts to $2,512,500, is made an irreducible school fund, bearing interest at six per cent, which is to be devoted exclusively to public schools. The law also provides for a state school tax of one mill on the dollar, a poll-tax of one dollar, and a tax of two dollars each on dogs. The schools are to be free to all resident youth between six and eighteen years of age. Hon. John M. Fleming has been appointed state superintendent.

BOOK NOTICES.

THE EDUCATIONAL YEAR-BOOK, 1873. A Hand-Book of Reference, comprising a Digest of American Public School Laws, Systems of Instruction, and Interesting Matters pertaining to Schools and Colleges, ranging from Professional Anecdotes to Educational Statistics. Published Annually. New York: William Wood & Co. 1873.

We have compared this volume with the one for 1872 to ascertain in what respects they differ. We find that this second volume (1873) contains sixty-eight pages less than the first—the reduction being due to a wise omission of nearly useless padding—and that it has about *twenty pages of new matter.* This second volume is simply a *revised edition* of the first, and we think it should be so announced. No one wishes to buy annually editions of the same work, with a few changes in statistical tables, names of officers, etc. The new matter comprises three tables of considerable value. The first gives the school attendance in fifty cities—in 1870, we suppose, as the percentage of attendance is based on the population according to the last census. The second gives the number of illiterates in the several states, and the third gives a list (not complete) of the Educational Periodicals in the United States and Canada. We learn from the last table that the OHIO EDUCATIONAL MONTHLY and THE NATIONAL TEACHER are both published in *Cincinnati!* We learn on page 118 who were the officers of the National Educational Association at the twelfth annual meeting, held in Boston, August, 1872, but it is probable that the officers named will serve at the thirteenth annual meeting to be held in Elmira, N. Y., next August. We are happy to add that the revision has corrected most of the errors which marred the first volume. The book contains only 154 pages, not counting some 25 pages of padding in the form of advertisements.

INDUSTRIAL DRAWING FOR BEGINNERS. Free-Hand. Numerous Geometrically Proportional Exercises, and Others, from Nature, systematically arranged, illustrating Principles of Practical Design, and well calculated to train the Eye and Hand, to strengthen the Memory and Judgment, to cultivate the Taste, and to develop the Imagination and the Invention. Boston: James R. Osgood & Co.

The name of the author of this little manual is not given, but it was evidently prepared by an experienced and skillful teacher of drawing. It is not a mere collection of drawing copies, but is a book of examples and instruction. The text contains an explanation of principles, directions for the execution of the drawings, and questions for examination and review. It not only presents the work to be done, but shows how to do it and for what purpose. This makes the manual a very valuable one for those who may wish a practical guide in learning or teaching drawing. It contains but few drawings from nature, and but little space is given to shading and perspective, the series of lessons being specially adapted to beginners. The manual is neatly bound in a flexible cover.

Part III and IV of Walter Smith's large and elegant "Drawing Book," published by the same house, fully justify all that we said of it after examining the first two parts. The drawing copies are standard designs of the very highest excellence, and their artistic and mechanical execution leaves nothing to be desired.

HARPER'S SMALLER SCHOOL HISTORY OF THE UNITED STATES, from the Discovery of America to the Year 1812. By DAVID B. SCOTT, Author of a "School History of the United States." With Maps and Engravings. New York: Harper & Brothers.

This little volume of 236 pages contains nearly, if not quite, all the important events and facts recorded in the larger work by the same author, but they are much more concisely expressed. The author has generally been successful in his endeavor not "to sacrifice clearness to brevity," but we think the style is not so lucid and simple as that of the larger work. We notice several paragraphs which seem to us a little stilted and obscure. In speaking of general education the author says: "The Common School and the United States are almost synonymous terms. Free education is one of the peculiar glories which the Americans hold precious." The paragraph on the Pacific Railroad has this sentence: "This remarkable enterprise, 1776 miles in length, was finished in the short space of three years." We wonder what would be the "length" of the Credit Mobilier in "miles" and "years" respectively? But these slips are exceptional and will doubtless be corrected by an early revision. The general plan of the work is very similar to that of the larger. The events are so grouped as to make the narrative continuous, and each paragraph is introduced by prominent type, which is very convenient in the topical method of reciting. The work has other excellent features, and it can not fail, we think, to prove a good manual for use in common schools.

YEAR-BOOK OF NATURE AND POPULAR SCIENCE FOR 1872. Edited by JOHN C. DRAPER, M. D., Professor in the College of the City of New York and in the University Medical College. New York: Scribner, Armstrong & Co.

This work gives a concise record of the investigation and discoveries in nature and science in 1872, which seemed to the editor to be of general interest. The classification adopted is similar to that used by the British Association for the Advancement of Science. It includes Mathematical and Physical Sciences, Chemistry, Geology, Social Science, General Biology, and Mechanical Science. The different articles and items are given under sub-headings, printed in bold-face type, and the contents of each section are indicated by a very complete index. These features facilitate reference and greatly increase the value of the work. We can most heartily commend this "Year-Book" to teachers, students, and all other persons who may wish a convenient compilation of the scientific discoveries and opinions, and of the improvements made in art and mechanical invention in 1872.

THE CONSTITUTION OF THE UNITED STATES; With a Concordance and Classified Index, and Questions for Educational Purposes. By CHARLES W. STEARNS, M.D. New York: Mason, Baker & Pratt.

This work contains (1) the Constitution, in clear, open type; (2) a classified index, in which its provisions are arranged under twelve general topics, making them a self-explaining commentary; (3) a complete ordance, with every word in the Constitution; and (4) some twelve of excellent questions for examination and review. This brief

analysis of the work is sufficient to show that it is not only the first of its kind, but that it is admirably adapted for use as a text-book in our high schools, academies, and colleges, where the fundamental law of the nation should be thoroughly studied. Its convenience as a book of reference has been tested by hundreds of persons engaged in legal and other professional pursuits. Its utility insures its success.

WORMAN'S GERMAN COPY-BOOK. In Five Numbers. Edited by H. E. HAYES. New York and Chicago: A. S. Barnes & Co.

This series of copy-books applies the improved method of teaching English penmanship to the German. Its use in German-American schools and classes can but result in more rapid progress in learning to write, and in the acquisition of a more easy and graceful style. The stiff and angular German handwriting needs to be Americanized.

——THE *Sanitarian* is the title of a new monthly journal, published by A. S. Barnes & Co., New York. Its design is to present the results of the various inquiries made for the preservation of health and the expectations of human life. The first number (April) contains several very valuable papers, including "The New York Quarantine Establishment" by the editor, Dr. A. N. Bell, of Brooklyn, and "School Poisoning" by Dr. C. H. Janes, City Sanitary Inspector. The magazine is handsomely published. Subscription price, $3.00 a year.

——THE *North American Review* for April contains the following able articles: 1. The New German School of Music. 2. Evolution of Self-Consciousness. 3. Théophile Gautier. 4. The Indian Question. 5. Herder. 6. Critical Notices. The number fully sustains the high character of this old quarterly. It is published by James R. Osgood & Co., Boston, at $6.00 a year or $1.50 a number.

——THE *Chicago Teacher* for April announces Mr. Baker's withdrawal, and the purchase of his interest by Mr. Mahony who assumes the "undivided and indivisible" responsibility of owning and conducting the periodical. Did the junior partner blow the senior out of the concern, or did the senior blow himself out? The change will at least show who did the loud blowing in the first three numbers. The new motto of the TEACHER is, "Radical in discussing measures; considerate in dealing with men." What it loses by this new policy in spice, it will gain in dignity and uesfulness.

NEW BOOKS RECEIVED.

GETTING ON IN THE WORLD. By William Mathews, LL.D. Fifth Edition. Chicago: S. C. Griggs & Co. Price, $2.25.

MANUAL OF GESTURE. By Albert M. Bacon, A. M. Chicago: S. C. Griggs & Co. Price, $1.75.

MONROE'S THIRD READER. By Lewis B. Monroe. Philadelphia: Cowperthwait & Co. 1873. Price, 75 cts.

LOGICAL BOOK KEEPING. By E. G. Folsom, A. M. New York & Chicago: A. S. Barnes & Co. Price, $2.00.

NATURE AND UTILITY OF MATHEMATICS. By Charles Davies, LL. D. New York: A. S. Barnes & Co. Price, $1.50.

UNITED STATES CONSTITUTION. With Concordance and Index. By Charles W. Stearnes, M. D. New York: Mason, Baker & Pratt. Price, $1.00.

ANALYTICAL AND PRACTICAL FRENCH GRAMMAR. By Jean Gustave Keetels. New York: Mason, Baker & Pratt. Price, $2.00.

THE BEST READING. Book about Books. New York: G. P. Putnam & Son. Chicago: Jansen, McClurg & Co.

SCHOOL REPORTS AND CATALOGUES.

Nineteenth Annual Report of the State Commissioner of Common Schools of Ohio. Thomas W. Harvey, Commissioner.

Annual Report of the Public Schools of Datyon Ohio. Warren Higley, Supt.

Annual Report of the Public Schools of West Virginia. W. K. Pendleton, Supt.

Annual Report of the Public Schools of Pittsburge, Pa. George J. Luckey, Supt.

Annual Report of the Public Schools of Rochester, N. Y. S. A. Ellis, Supt.

Annual Report of the Schools of Worcester, Mass. Albert P. Marble, Supt.

Annual Catalogue of the Public Schools of Ann Arbor, Mich. Walter S. Perry, Supt.

The Cornell University Register, 1872-73. Andrew D. White, LL.D., President.

Proceedings of the State Teachers' Association of Tennessee, at the Seventh and Eigth Annual Sessions,—1871 and 1873.

Health Exercise: The Rationale and Practice of the Lifting Cure, or Health-Lift. By Lewis G. Jaynes. Providence: Providence Press Company.

Moral Education: An Address before the Cincinnati Principals' Association. By Thomas M. Dill, Principal of Twentieth District School.

The True Method of Representation in Large Constituencies. By C. C. P. Clarke, of Oswego, N. Y.

Notes on the First Book of Benson's Geometry. By Lawrence S. Benson. New York: James S. Burnton.

Observations on the Senate Committee's Report respecting the Credit Mobilier of America. By J. W. Patterson.

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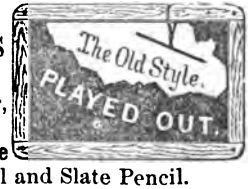

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THE

NATIONAL TEACHER:

A MONTHLY EDUCATIONAL JOURNAL.

Vol. III. JUNE, 1873. No. 6.

THE COMMON-SCHOOL SYSTEM OF BADEN.

INSPECTION BY STATE SCHOOL COUNCILORS.

Nearly every German state has a "Superior Educational Council",* one of whose most laborious functions is the frequent personal inspection of schools. In Baden this State Council consists of eight members, five of whom are practical school men, and hence more particularly charged with the duty of school visiting. There being more than two thousand schools, and an inspection by a State Councilor being required as often as once in four years, each inspection requiring at least one day, these five councilors are expected to spend in the aggregate about five hundred days per annum in actual school inspection. In practice they fall below this aggregate, perhaps to four hundred days per year.† The councilors are each allowed actual traveling expenses and a *per diem* for board, while on inspection tours, in addition to the fixed salary.

The nature and method of these "inspections", as well as many other points of interest, can best be set forth by describing a few actual "visits."

On a January morning, by previous arrangement with a State School Councilor, a close carriage, hired for the occasion, called at the consulate to bear me to a village school inspection,

*See the March number of this journal.

† It is to be remembered that there are also eleven "circuit councilors" or inspectors, each having in charge, inspecting and reporting annually, about two hundred schools.

about fourteen miles distant. We arrived at the village about 10 A.M., and found the pastor, mayor, head-teacher, and other members of the "local school council", ranged on the sidewalk to receive us, with uncovered heads and respectful bows. As we were ushered into the schoolroom, every child arose and bowed. The teacher took down his violin, struck a few notes, the children (seven and eight years old), without further assistance, sang a hymn, all clasped their hands and bowed their heads, while one repeated audibly a metrical prayer, which all followed with their lips, closing with an audible *Amen* in concert. This is the uniform method of opening and closing every school session.

The school to be inspected consisted of about 250 pupils, *all the children of seven to fourteen years* in a Protestant village population of 1,500, and *all taught by two teachers.* Class I, consisting of sixty-six pupils, seven and eight years old, divided into first and second divisions, was the one before us, and was at once put to work by the inspecting official. The second subdivision, which had been seventeen months in school, wrote on their slates from dictation simple, short-word sentences, two or three being announced at a time; as, "God is good", "The oven is black", "The weather is fine"; while the first division, seven months in school, read similar sentences from the reader—all creditably done. The written sentences exhibited well-formed and evenly written letters, with spelling, pointing, and capitalizing almost invariably correct. Next, the first division spelled small words by sounds and by letters, and the second short sentences, indicating capitals and points. For example, in spelling the sentence, "The Lord is God", the first pupil would say "Large *T, h, e, The.*" The second, without a moment's delay, would follow with "Large *L, o, r, d, Lord*"; the third, "*i, s, is*"; the fourth, "Large *G, o, d, God*—period"; while the fifth would repeat the sentence. Then the first division was tested orally in addition and subtraction up to 20, and the second up to 100. Brief recitations followed, mostly stanzas of hymns or metrical prayers, and some simple definitions of words used. The exercise lasted one hour, the inspector keeping all busy, while the rest of us occasionally lent a hand. Pupils remained at their desks, but rose to speak. At word of command, books and slates were gathered up; at touch of violin, all arose, sung and prayed as before, and filed out with a bow and audible "Adieu."

Class II, first and second divisions, fifty-two pupils of third and fourth school years (ninth and tenth age years), at once filed in, making no little confusion in getting their seats, as in all these schoolhouses the desks are made for six to eight pupils each, necessitating much *climbing over and crawling under to get places.* The violin soon silences, and the singing and prayer leave all quiet. It may be said that generally written and oral exercises are so alternated as to keep the entire class engaged. First division (third year) pupils read, point out, define and classify nouns, give rules for capitals and periods, define words, write on slates the verbs in reading lessons, answer questions in multiplication and division tables, currency, barter, and exchange,—the latter being especially necessary in Germany from the endless variety of moneys in use. Second division (fourth year) pupils write on slates from memory several paragraphs of their own selection—scripture texts and hymn stanzas generally written,—recite songs and hymns; read, with frequent definition of words and descriptions of things. The subject of reading lesson being "The Oak", it was asked why the roots are so large, so strong, so wide-spread, whence nourishment, how obtained, what the uses of oak, why used for water structures, etc. Nouns, adjectives, verbs, adverbs, auxiliary verbs, pointed out, defined, illustrated by examples in impromptu sentences—all based on reading lesson, *no grammar book being used in common schools.* "4690361 × 34 — 4690365" was orally given for slate execution. Square miles, length, breadth, and boundaries of Baden given, with rise, course, length of rivers, length and hight of mountain ranges of Baden. Song and prayer. Exercises lasted from 11 until 12½ o'clock, and were followed (the inspector allowing himself no midday intermission) immediately by an examination of—

Class III, first and second divisions, fifty-six pupils, fifth and sixth school years (eleventh and twelfth age years). *First Division.* Reading indistinct and spiritless, posture stooping and negligent. Neck cloths were ordered off, and sharp reprimand administered by inspector. Subject of reading, "Flax and Hemp"; many questions on their culture, handling, and uses; reading in Roman print; modulation generally very bad.

At this point the inspector, being not a little wearied, directed the "head-teacher" to conduct the examination in arithmetic. Simple fractions were defined, illustrated on blackboard, money and barter questions orally solved—all wretchedly done, with

constant interference of teacher and most glaring "leading questions." Inspector announced orally for slate solution, "18212 ÷ 24 — 758."

Second Division. Map of Baden; names of several parts; population; square miles; basel, source, and courses of the Rhine; time of snow-melting in the Alps; storms on Lake Constance; nature of Rhine channel from Mayence to Cologne; uses of Rhine; mountains of Baden; Black Forest and Odenwald; heathen (local) mythology; occupations in Black Forest; straw-plaiting, pitch, and clock making—all badly done, with leading questions, constant irrelevant digressions, and *speechifying* by the teacher, to the manifest displeasure of the inspector. The exercises lasted until 2 P.M.

Class IV, two divisions, sixty pupils, seventh and eighth school years (thirteenth and fourteenth age years). Reading, very bad—utterance indistinct, inflection execrable; subject of reading, "The Nourishment of Plants"; numerous questions on soils, mineralogy, geology, chemistry, physiology of plants, meteorology, formation of dew, rain, snow, and hail as "air products"—all questions of a simple, practical, and valuable nature, and generally pretty well answered. Recitation of a long poem on "Nature", one stanza by each pupil. Writing: each pupil directed to tear a leaf from his copy-book, and write a letter to a supposed brother, absent in military service, urging him, in view of the father's illness, severe but not dangerous, to apply to his officer for a few day's furlough for a visit home. In ten minutes the letters were written, folded, and directed, with very general correctness and neatness in all particulars.

Schoolhouse inspected—a two-story stone building giving two schoolrooms, each 20 by 30 by 10 feet, with dividing hall and stairway; dwelling of five rooms above for head-teacher, and lodging room for under-teacher; back-door yard, wood, and coal house; small garden; cow stable and pig pen—all good and substantial, but plain. This is the average Badish town or village schoolhouse, *a residence for the head-teacher being always included, and he being responsible for care of the property.* After the church and parsonage, the school and teacher's house is generally the most pretentious building.

The schoolrooms under inspection were very dirty. Their furniture for each were an immense iron stove; benches and desks, each built for eight to nine pupils, very plain, and in ill

proportion for health and comfort; an arithmetical frame, reading frame, wall maps of Baden, Palestine, and Europe, a blackboard (3 by 3 feet), and a thermometer.

"Inspection" being over, the inspector assumed the rôle of "superior councilor." He called the two teachers and local council, who had been present most of the day, to a consultation, pointed out faults in the school work and schoolhouse, directed ventilators to be put in the windows, the desks to be modified in accordance with the prescribed form, more recent maps to be procured, etc. He then asked the teachers separately for any suggestions, the local councilors ditto; inquired into the working of the present school law, explained some contemplated changes; talked all into a good humor, and said good-bye.

It was now 5 P.M. The pastor, state councilor, and consul went to the village hotel, and had a superb dinner, served a little before 6 o'clock, at the close of which the "local councilors" dropped in, and an hour was spent in friendly chitchat and German cheer, after which came the rapid homeward drive.

A week later, 7½ A.M., found us again snugly wrapped, in a close carriage, and rapidly driven, at state expense, toward the Odenwald for a school inspection, sixteen miles distant. The official reception was much as before. School buildings, appurtenances, and fixtures quite similar to those described above, but in all respects better; two schoolrooms, 22 by 32 by 11; dwellings in second story, of five rooms each, for the two teachers; village population, 1,600; school attendance, 280.

Class I, first division, fifty pupils; seven and a half months in school, two and a half hours daily; read (sitting in bad posture) monosyllables; spelled same by sound and letter; added and subtracted between one and twenty; and copied on slates from blackboard; 9½ to 10 A.M. Second division, fifty pupils, eighteen months in school, two and a half hours daily (one hour less than regulation, on account of size of school): read and spelled paragraphs, wrote words of four syllables, always indicating capitals in spelling; wrote on lined slates a paragraph from reader (admirably done); added and subtracted mentally, and read numbers from one to one hundred; picture, card, and object lessons, with answers in full sentences; formation of plurals of nouns; and singing, with criticism; 10 to 11 A.M.

Class II, forty-five pupils in third year and fifteen backward

pupils in fourth year: read (sitting badly) with constant definitions and explanations; definitions and illustrations of parts of speech and their accidents, as nouns, genders, numbers, adjectives, articles, verbs with numbers, persons, and tenses, pronouns; short, simple sentences, with present tense of irregular verbs, announced to be written (as writing exercise) on slates in *perfect tense*—neatly and correctly done; notation, numeration, and addition of numbers up to thousands; multiplication and division tables, multiplication of numbers of two and three figures (orders of units), with explanation in detail of local and simple values of each figure in partial product; 11 to 12½ M.

Class III, first and second divisions, thirty pupils of fourth year and forty pupils of fifth year (ten and eleven years old): read with utmost rapidity, and with no heed to expression; after reading, the matter read was narrated in much detail—quite well done; classification of parts of speech, accidents of same, including cases, tenses, degrees of comparison. First division multiplied 50314 yr. 2 ft. 11 in. by 8, divided product by 12 and subtracted half the quotient from original quantity—tolerably done. Second division answered sundry quite complex questions in addition, subtraction, multiplication, and division of currency, and gave many facts in natural history of beasts and birds—all very practical; 12½ to 2 P.M.

Class IV, first and second divisions, sixty-eight pupils (twelve, thirteen, and fourteen years old): recited twelve to fifteen songs—rapid, indistinct, devoid of expression; read—without expression; wrote, folded, and addressed a business letter to a supposed friend, in a neighboring city, on the prospect of the potato crop, probable quality and price of potatoes—well done; arithmetical exercises in practice, simple proportion, simple interest, vulgar and decimal fractions; singing, with four parts; 2 to 3½ P.M.

Exhibition of handwork of girls of last four school years (lessons six hours weekly under charge of a paid needlewoman), consisting of plain sewing, knitting, crocheting, and various embroideries, in great quantity and number.

The inspection was followed by a consultation meeting between state and local councilors and teachers,—a third teacher to be employed next year; and an inspection of buildings and grounds. We had a capital hotel dinner at 5½ P.M. with state councilor and pastor, as president of local council, and after

dinner was a chat of an hour with assembled "councilors", followed by a late drive home to the capital.

At another school inspection, reached by a carriage drive of fourteen miles, there was found a school building with three dwelling rooms, and one schoolroom, 20 by 16 by 8 feet; village population about 300; school attendance 54, under one teacher.

Class I, first and second division, twenty-six pupils of first, second, third, and fourth years: first year pupils copied on slate from reader—well done; second year recited and then wrote a sentence, each his own selection; third and fourth year pupils read and pointed out and defined nouns, adjectives, articles, personal and possessive pronouns, verbs; explained genders, numbers, persons, the present, past, and future tenses; substituted and interchanged words, gave rules for capitals; wrote a slate full of "composition" on "The Fishworm" (subject of reading lesson)—well done in twenty minutes; first year pupils wrote down addition table complete from one to twenty; second year pupils read in words of one to three syllables, and answered questions on subject matter; first year pupils read from print and *script* in words of one and two syllables, and repeated each sentence as read; recited and explained proverbs, Bible texts, and hymn stanzas; second year pupils recited addition, subtraction, multiplication, and division tables; third year pupils added, subtracted, multiplied, and divided in currency and simpler denominate numbers—all simple and practical; fourth year pupils reduced 36,786 feet to inches; mental operations in simple fractions and "reduction"; second year pupils recited songs, a stanza each, and third and fourth year pupils, poems and narratives, each beginning where another left off—very well done.

Class II, last four school years, twenty-eight pupils: all read together on "The Beginning of the War of 1870", and answered many questions on frontier geography, contemporaneous German history, general movement of German armies, use of military telegraphs, banners, colors, emblems, royal houses of Baden, of Prussia, number of German armies with their commanders, etc.; gave difference between "sentence" and "thought"; defined "subject" and "predicate", nominative case, neuter and active verbs, adverbs, and adjectives, pure and modified, interrogative sentences, dependent clauses, all cases of nouns, punctuation of sentences: fifth and sixth year pupils added $4\frac{1}{2}$, $3\frac{3}{4}$, $8\frac{1}{16}$, $6\frac{2}{3}$ and $15\frac{1}{4}$, and multiplied sums by $2\frac{2}{3}$—generally correct;

seventh and eighth year pupils solved mentally complex examples in interest and exchange; copy-books exhibited: fifth and sixth year pupils wrote to an absent friend an invitation to a wedding, and fourth and eighth year pupils gave a synopsis of reading lesson from memory; singing; exhibition of handwork of girls; consultation meeting, wherein inspector instructed local council to provide at once a better schoolroom; late hotel dinner, after dinner evening chat as usual, and night drive home.

Such are the inspections of Badish common schools by the State School Councilors,—practical, simple, comprehensive, and often searching. Copious notes are taken on all points, and embodied in "reports" to the full council. The suggestions of the inspector are given and received as authoritative, whether to buy a map or build a schoolroom. Instruction is expected to be quite general within the common school range, but simple and practical; ready thought and application of principles rather than severe reasoning or theorizing. The only textbooks used are readers, small school maps, mere skeletons of arithmetics, and the BIBLE of which every pupil has a copy. Religious instruction is under control of the pastor, and is inspected by district pastors or deans. The schools visited by us are all in Protestant villages. In Catholic villages they are a little inferior, because the priests will not interest themselves in *secular schools* as much as the pastors do.

N. B. It should have been stated that in none of the above schools has any class more than one session of three to four hours a day.

Carlsruhe, April, 1873. WM. H. YOUNG.

PLATO AND EDUCATION.

All Greek culture points to Plato as the ripe result of its influence. He is the summing up and embodiment of the intelligence of his day. He knew all that Athens could impart, all the science of the Pythagoreans, and all the lore of the Egyptians. He knew, and could use what he knew. Plato is the greatest name in education, and his dialogues are the true point of departure for whoever would trace the winding road along which nations and individuals have pursued human culture

for the last twenty-three hundred years. Pedagogy without Plato is like a tree without a tap root. Professor Jewett observes that the Republic is the "first treatise on education, of which Milton and Locke, Rousseau, Jean Paul, and Göethe are the legitimate descendants." It is a fact curiously illustrative of the dearth of human ingenuity that twenty centuries have added almost nothing to our knowledge of the mind and the right method of its development.

According to the scanty record which history furnishes, Plato was born at Ægina, 429 B.C., the year in which Pericles died. He lived through a period of 81 years, and expired, it is said, in the act of writing, or, according to another authority, with his head pillowed upon some favorite books. He was of doubly illustrious blood, his father being a descendant of Codrus, a Hellenic king, and his mother a relative of Solon, the wise lawgiver. His book-education was supplemented by extensive travel, and familiar intercourse with the most famous men of his time, especially with Socrates, his great teacher. How well was he fitted by nature, by study, and by experience, to comprehend the intellectual and moral condition of the people of Athens, and to show them the highway of reform! He was wise enough to be moderate. He saw evil enough, but was no rash innovator. He could wait patiently for the leaven of his transforming philosophy to work. It is working to-day. Transmitted through centuries and nations, it swells and flavors the educational loaf of Germany, France, England, and America.

What we call our advance ideas in education were anticipated by Plato. To the Greeks they seemed Utopian dreams and poetic rhapsodies. All of Plato's works abound in educational hints and suggestions, but the Republic and the Laws contain direct discussions on teaching and training, and may be considered, as a commentator declares, "theories and plans of civic education rather than schemes of legislation and details of laws." In his two great works, Plato develops a philosopher's conception of a perfect human society—an ideal commonwealth. His scheme of education reaches its grandest proportions in the Republic, though in the Laws, written later, much of practical importance may be found, and perhaps a nearer approach to the ordinary modern conception of the aims and objects of schooling. The materials upon which this article is based, are drawn mainly from the Republic.

It is not possible entirely to separate in the Republic what belongs purely to Plato from what belongs to the prevailing system of education. In building his new ship the philosopher would model it somewhat on the old plan, and would use such of the old timbers as were sound and serviceable. The new ship was to meet all the useful ends of the old, and to be infinitely larger and grander.

As man, in Plato's view, was destined to live for the state, his training should fit him for civic duties, and it should be prescribed and enforced by the state. It was the state's duty to educate the citizen as it was the citizen's duty to serve the state. Education should be compulsory. This was new doctrine. Teachers should be maintained at the public cost. This was new doctrine. The girls should be educated in the same way as the boys, for a woman is "but a lesser man." This was new doctrine. Plato urged women's rights and duties to an extent that would startle Mrs. Livermore. He would have women share in all the hardships of life, not excepting war.

His whole scheme of government and education is tinctured with a strong admiration of Spartan severity. In the ideal Republic, the women and children were to be in common, and no parent was to know his own child. This is not the only Platonic notion repugnant to the modern mind. Like Wilhelm Meister, we are shocked and saddened at the discovery of a defect in a writer whom we honor. But a candid recognition of Plato's shortcomings, *or of his differences from us*, is necessary to a correct appreciation of his merits. He differs radically from enlightened moderns, in regard to the relative rank and value of men. He adopted the oriental idea of caste. He represented the different classes of men under the symbols, gold, silver, brass, and iron. He believed in the educability of men, not of man. Brass and iron were born to menial stations,—born to be governed and used. Gold and silver were by nature susceptible of culture, were noble, were fit to become guardians and rulers of the state. It is not strange that with this aristocratic view of society, Plato should associate contempt for common people and manual labor; or that he should see nothing wrong in the fact that the proportion of slaves to free burghers was as twenty to one in Attica.

Plato's primary conception of a state implies the existence a large number of ignorant, dependent, but productive citizens, under the control aud direction of a few select guardians and

rulers of both sexes. The guardians are to be soldiers as well as civilians. The description of their nurture and training constitutes Plato's scheme of education. They are to be the offspring of the most perfect parents. Their nurture even anticipates birth, and prescribes that the conduct of a woman in pregnancy should be moderate, gentle, and gracious, and that her physical habits should be such as to secure the highest degree of health and vigor in her child. The infant's first three years should be exempt from fear and pain. Strong, prudent, and intelligent nurses ought to be secured. The children require a great deal of exercise and amusement, and they should be provided with toys and sports adapted to their age. Much stress is laid upon the importance of *beginning* right. Man is potentially a being beautiful, strong, and good. If the body is healthy from the start, if the mind is wisely directed in its first motions, and if favorable influence continue, the child will inevitably expand into the proportions of a right man. The primary education is to give the body and soul freedom, to remove obstructions that hinder natural growth, to surround children with all good and wholesome stimulations by which they may develop into happy youth as a rose blossoms. Much freedom is to be granted in childhood, but not license. Respect for parents and elders must be maintained. Punishments are sometimes requisite, but should never be ignominious, or inflicted in anger. As children grow older, they are to be held with a tighter rein. "Of all animals, the boy is the most unmanageable, inasmuch as he has the fountain of reason in him not yet regulated; he is the most insidious, sharp-witted, and insubordinate of animals."

At the age of six, the sexes are to be separated, and sent to school. And now what shall the training be? Is there a better than the time-honored curriculum, gymnastics for the body, and music or literature for the soul?

Literature is to be taught not so much as a matter of knowledge as a means of forming correct moral principles and mental habits. Tables and poems are to be committed to memory, but only such as convey a proper lesson. The young and tender mind must receive only right impressions. To this end mythology should be expurgated; Homer and the other poets are to be cleansed of all that encourages intemperance or lust, and all that tends to produce terror, such as horrible descriptions of hades. The gods are to be represented not as yielding

to the passions and vices common to men, but as beings altogether pure and noble. Plato's education is based upon a religious creed at once simple and sublime. God is good and unchangeable. All tales that teach the contrary are to be rejected, no matter how great their literary merit. True piety, sound morality, must be inculcated, whatever else be left out. Do not we Chistian teachers stand rebuked by a solemn voice sounding across the lapse of twenty hundred years? With us intellect comes first, and morality is only incidental. The man or woman who would spend an hour a day teaching bravery, temperance, self-denial, truth, and reverence in our schools, would be regarded as wasting time. I wonder if this is as it should be?

(To be concluded next month.)

Cincinnati, O. W. H. VENABLE.

GEOLOGY IN PUBLIC SCHOOLS.

MR. EDITOR: At your request, I present to your readers a few thoughts on the subject of a more general introduction of the study of Geology in our public schools.

Perhaps the first inquiry should be, Will such a study be useful? The usefulness of any study depends chiefly on two things: the information it gives, and the discipline of mind it secures.

In regard to the first point, all must concede that geology deals with facts almost innumerable,—facts in detail, and in groups,—facts physical, mineralogical, chemical, zoölogical, vegetable, and the like,—facts pertaining to the earth, as such, from its surface to its center. These facts are in such number and variety as to leave scarcely any mental taste or desire unsatisfied.

Nor are these facts altogether distant and foreign, for almost thousands of them are under the very feet of boys and girls on their way to their schools. They are in the soils and in the sands and gravels on which they tread, in the traveled bowlder, in the shape and contour of the hills over which they climb, in the quarries and ledges, in the curious fossils which fill the rocks, in the ripple marks showing old shore lines, in the cracks made in the ancient mud as it dried; indeed, they are every where pressing on the attention of keen-eyed boys and

girls. As compared with the facts of geography, those of geology are not half so foreign to the personal observation and sphere of children. For example, a boy in studying his geography finds Columbus simply indicated on the map as the capital of the state of Ohio, and situated on the Scioto river. The same boy, if studying geology, can find along the streets striated bowlders of granite or similar rock brought from north of the lakes; drifted limestone bowlders from which his hammer breaks out many beautiful fossils; along the Scioto he finds the terraced gravel banks with sand and gravel curiously spread or heaped by ancient currents and waves where all is now dry; or, if on a rainy day, he visits the stone steps of the State House, he finds them revealing most beautifully through the water varnish the most interesting forms of shells and crinoids and corals, all of which forms, with many more, he may find by a pleasant Saturday's excursion to the quarries near the city. Within the city, or within a mile or two of it, he may collect a cabinet of no small variety and excellence.

Thus the facts upon which the science of geology is based are every where; for Columbus has little advantage, in this respect, over thousands of other towns and villages in the land. Boys and girls will find near their homes, or within easy excursion-distance, the stony text-book of nature spread invitingly open for their perusal. This book furnishes themes for profound thought and investigation.

This leads to the second question, viz., Will the study of geology tend to stimulate and discipline the mind? The history of geology thus far shows that, perhaps more than any other science, it awakens interest and thought, and with these discussion. The more thoughtful of our people in every station in life are becoming more and more interested in the questions of the origin of the rocks and of their mineral contents, and also in the history and significance of the organic remains they contain. Nearly fifty thousand copies of the various reports of the Geological Survey of Ohio have been already published, yet the members of the Legislature find the supply far below the urgent demands of the people. Similar surveys are in progress in Indiana, Illinois, Michigan, Wisconsin, and Minnesota, and a second survey is about to be commenced in Kentucky. While with many it is doubtless true that the results obtained by these surveys are prized chiefly for the economic value of the information, yet with most there is a genuine desire to obtain

knowledge for its own sake. This desire becomes in thousands of minds most urgent. It is, indeed, a true *thirst* for geologic knowledge.

If the science is properly taught, the pupils will almost necessarily take interest in it. A boy finds a northern bowlder in his walks. Where did it come from? and, How came it where he finds it? are his first questions. This leads to the whole subject of drift and drift theories, of glaciers, icebergs, and currents of water. So with the fossil shells and fishes and plants he may find; he wants to know their origin, and what strange story they may have to tell of life in the undated geologic past. Thus it is with every thing connected with geology. It matters little with what simple fact the student begins his inquiries, that fact will necessarily stimulate thought and investigation. Not only are his reasoning powers exercised but his imagination is brought into play in order to follow up with distinct mental vision all the grand movements in the past history of the earth. He sees the play of causes, and marvels at the wide extent of effects. The marshes of the coal-era stretch along the shores covered with luxuriant vegetation. The waters of the ocean teem with life in a thousand varied forms. The lands sink below the ocean in slow subsidence, and again emerge with all the wealth of marine organic forms. On the land, he stands in imagination in the presence of the forces which have lifted up the mountains and eroded the valleys. There is a vivid realization of the wonders of world making and world shaping. The vast changes through which the earth has passed and is passing come distinctly before his mind.

"There rolls the deep where grew the tree,
O earth, what changes hast thou seen!
There where the long street roars, hath been
The stillness of the central sea.

"The hills are shadows, and they flow
From form to form, and nothing stands;
They melt like mist, the solid lands
Like clouds they shape themselves and go."

The last point to be considered is, How can geology be taught in our schools? Exactly, I think, as any thing else is taught, viz., by having good teachers and good text-books. In all successful study,—at least until the student has reached the high point where he can be his own guide, and this is seldom the case until he becomes an investigator,—the chief element of

success is *a good teacher*. Such a teacher must have full and definite knowledge of what he teaches. The teacher of arithmetic or geometry must be able to go to the blackboard with ready and confident step. So with the teacher of geology. He must go to the board with something of the alacrity displayed by Agassiz as he explains the movement of a glacier or the structure of a fossil fish. Definite knowledge and enthusiasm always make a good teacher. I readily grant that many teachers would fail as teachers of geology, but probably they fail as signally in teaching geography, although they attempt the latter in their stupid hum-drum way. Any one who is an earnest and successful teacher of geography, and especially of physical geography, may be equally successful in teaching geology. The two are essentially the same; geology only carrying back into former times the operation of the same physical and vital forces which are now modifying the surface of the earth.

The teacher of geology must have something more than a mere knowledge of his text-book. He must be himself an *observer*, and be able to illustrate his text-book lesson by what he has seen. He may not have traveled far, but he should be familiar with his own region, and should be as able to show on what geological formation it is as to tell the name of his county. Geography is best taught by beginning at home, and working outwardly from that as a centre; so with geology. The teacher should be able to point out every interesting feature in the neighborhood of his school. In this way his pupils become interested, become observers themselves. Let him take his boys and girls, and go upon little excursions, and collect specimens of rocks and fossils, examine bowlders and gravels, trace out valleys, recent and ancient, and see where the rocks form ledges, and where they are rounded into graceful hills and are covered with soil and verdure. Let his pupils make sketches, however rude at first, of what they see, and be able to draw upon the blackboard geological sections of the rocks and outlines of all the peculiar features of the region.

There is nothing difficult in making such observations; it is exceedingly easy and simple. I know that many teachers regard all sciences as something very mysterious, and would as soon think of reading a physician's prescription or a page of Sanscrit as the simplest page in the Volume of Nature. All that is needed to make a fine beginning in geology is to use the eyes and gather facts, and then search for an explanation of these

facts. If a teacher will do this with some measure of enthusiasm, he will soon be fitted to teach a text-book; for, although he has personally seen only a few formations, and worked out only a few principles, yet he is "zealously affected" toward the whole study.

There is, certainly, no study which the teacher can more easily explain and illustrate. Chemistry can not be illustrated without a laboratory, which very few schools possess. In natural philosophy the chances are, that, if any apparatus was ever bought by the frugal school trustees, it soon became out of repair and utterly useless. It is only in the larger villages and towns that we generally find the appliances for physical and chemical illustration. Not so in regard to geology. The writer once heard a resident of a city drawl out an opinion respecting some bituminous coal, that it was "very good *country* coal"—not dreaming but that the best coal was in some way a city product! I have no doubt that country geology will, at least, answer fairly for country-school illustration!

But how shall we obtain interested and capable teachers? They must either be taught or teach themselves with the aid of nature and of books. We have many institutions for the special instruction of teachers—some normal; others quite abnormal. In all these geology should be taught. Lectures on geology should be given at teachers' institutes. Many of our colleges, both west and east, need to give this department more attention. Some of the high schools, like that in Cleveland, make geology a very successful study, and the pupils who graduate at them are better fitted to teach it than the graduates of many of our colleges. It would be time well spent if teachers should make science, especially geology, chemistry, and physics, a matter of special study in some well-equipped scientific school. Two years spent in such an institution would give definiteness and a spirit of scientific enthusiasm which would be of incalculable benefit to the teacher all his life.

But if the teacher can have none of these advantages, let him educate himself in this department. He can, at least, obtain a few books and the geological reports of his state. With these and with such field study as he can obtain by excursions within a reasonable distance of his home, he can become a very respectable geologist. Hugh Miller reached the highest eminence in this very way.

Our schools need the best of text-books in geology. The

science is becoming so vast, that it might be well to have them much more local and special in the treatment of their themes than most of them now are. Let the more foreign facts be relatively few, while the discussion of home areas are made especially full and clear. For example, there is an essential similarity in the geological structure and relations of the Western States. We need here chiefly a full and distinct account of the so-called Paleozoic rocks, which extend from the coal measures down to the lower Silurian, with also a full account of our surface geology, including the drift and the drift theories. Other formations should not be ignored by any means, but should be treated with far less fullness. A text-book which, for example, should give only a little space to the coal measures which spread over large portions of Pennsylvania, West Virginia, Ohio, Indiana, Kentucky, Illinois, Missouri, Iowa, etc., is not well suited to teach geology to the youth of these states. A good text-book should be illustrated with distinct and beautiful figures of the more interesting and important fossils. If it gives the information most interesting and most prized, it will be likely to be the most useful as a means of education. With such a text-book and with bright and earnest teachers the study of geology in our public schools may be made a powerful stimulus to the growth and culture of the youth of the land. In many respects it would have an advantage over all the other studies of its class. E. B. A.

A COUNTRY TEACHER'S OPINION OF COUNTY INSTITUTES.

If county institutes are intended for the benefit of country teachers—who are usually considered as being at the foot of the educational ladder—it is not unreasonable to suppose that they should be interested in the manner in which these institutes are conducted. It is American for the "common people" to be interested in and to criticise the actions of their servants who are in station above them. Even very small children have their opinions of their teachers, and sometimes express them in such a way as to put the would-be "know-every-things" to the blush. We just now remember a teacher, who told one of his boys, who had expressed his dissatisfaction with the teacher's

plan, that *he* was "running that thing." "Yes, running it into the ground", was the boy's reply. We can vouch for the fact that that teacher profited more from this cutting remark of his pupil than from a dozen lectures on school management.

Our county institutes are doing great good, but that does not preclude them from honest criticism. No doubt they are slandered and caricatured many times by those who would wield the critic's pen, but, as Lowell says, "it is the bit of truth in every slander, the hint of likeness in every caricature, that makes us smart."

We have heard men lecture before institutes, who knew about as much *practically* of the subjects they were discussing as Queen Victoria knows about plowing in a western prairie. We should advise such institute lecturers to read what Ruskin says about modesty.

Institutes are usually conducted on the lecture plan. Lectures are very good in their proper place. They are very good when the auditors are nearly on a level with the speaker, but when men who know much about a subject, take that plan to instruct those who know little or nothing about it, we dissent. It is that "pouring in process", of which the author of "The Theory and Practice of Teaching" says:

"Whenever the teacher does not first incite inquiry, first prepare the mind by *waking it up* to a desire to know, and if possible to find out by itself, but proceeds to think *for* the child, and to give him the results before they are desired, or before they are sought for, he makes the mind of the child a *two-gallon jug*, into which he may pour just *two gallons* but no more."

Now we think this will apply to country teachers, who are "children of a larger growth." We are all children relatively considered, and all learners.

Says the same sensible writer, "This process of lecturing children into imbecility is altogether too frequently practiced." The institute lecturer "thinks for" the teacher. Would it not be better for the instructor to hold himself in reserve, and let the teachers discuss among themselves the questions which are dear to them—which are perplexing them every day in the schoolroom? Some are better than their fellows in some points of teaching and in others worse. Let there be such an exchange of plans that have been tested and succeeded or failed, as the case may be, that the weak may be encouraged, the conceited

improved by their blunders, and all be benefited by the healthful discussion.

Most institute instructors are men who are *not* fresh from the schoolroom, and as to those who have had experience in the country schools, it was in years of the past when schools were different from those of to-day. What do they know of teaching a country school in the "living present"? They may be capable of instructing those who teach the graded schools, but there is as much difference between teaching them and teaching in the country as there is between farming in Illinois and farming in Switzerland. We would suggest to a gentleman who makes it a business during the summer months to lecture to institutes, to disguise himself and mingle with groups of country teachers and hear their criticisms and remarks; and then report the same in an educational journal, that he and all others may profit thereby.

> "O wad some power the giftie gie us,
> To see oursels as others see us"!

If the teachers were allowed to have *their* say in institutes, he could not go home and, like Æneas, say, "*quorum magna pars fui.*" If institutes were properly conducted, Prof. A. and Dr. B. and Hon. C. D. would have no more to say in them than Miss E. or Mr. F.

Let each teacher who attends an institute have the privilege, in turn, of teaching the rest, they acting as "children", with the privilege of criticising. The instructor might have the same privilege, and act as a judge to decide points and keep the criticism within bounds. The blunders occurring had far better be made there than in the schoolroom among the real children. Indeed, every mistake would be worth a lecture to the one making it.

Such a course, it seems to us, would very materially elevate county institutes, and make them a power in our country. We think also that they would be better attended. Teachers are very much like other folks, and do not like to be lectured to. It certainly is a "weariness of the flesh" to listen to lectures by the hour.

It is true, teachers are anxious to hear the "big guns" of the profession, and we confess to the weakness of having desired to attend certain county institutes for no other purpose. But with the majority, the desire of improvement is greater than

this curiosity. But if we wish to hear them, they will, no doubt, give a few of their best lectures in the evenings.

Why should a few be privileged to say all that is said in an institute; to monopolize the time that is paid for by the teachers? If institutes would partake more of the character of a medical association, where the humblest practitioner is expected to give the results of his practice and his views as well as the leaders of the profession, then we would begin to hope that teaching had taken its place among the professions. Is it not this exchange of thought and experience, this grappling of mind with mind, that has conduced to progress in all trades and professions? Why should the humble teacher from "Pordunk" district sit back, and only take notes or listen to or answer questions, while some more important individual—important only because he happens to teach in a higher school or in the town—is privileged and expected to spend hours in self-laudation, expounding some pet method of his own hatching? Why is not the most "common school teacher" encouraged to open up his thoughts, rudely expressed though they may be?

> "Thoughts shut up want air,
> And spoil like bales unopened to the sun."

Does not the teacher sacrifice his time and spend his money that he may improve himself in his profession? He goes there to learn.

> "Teaching we learn; and giving we retain
> The births of intellect: when dumb forgot.
> Speech ventilates our intellectual fire;
> Speech burnishes our mental magazine,
> Brightens for ornament and whets for use."

We imagine this is a live question. At least it is the thought of one country teacher, and we know will be echoed by thousands who have had a like experience.

G. DALLAS LIND.

—— ALL fact-collectors, who have no aim beyond their facts, are one-story men. Two-story men compare, reason, generalize, using the labors of the fact-collectors as well as their own. Three-story men idealize, imagine, predict; their best illumination comes from above, through the skylight.—OLIVER WENDELL HOLMES.

NOTES ON THE BOSTON PRIMARY SCHOOLS.

On the opening of the schools after the long vacation, September 2, I commenced a course of inspection of the primary schools, and continued the work daily, except when unavoidably diverted from it by other duties, until every one of the three hundred and thirty-six schools was visited.

The schools, on the whole, produced on my mind as favorable an impression as I had expected. From year to year no very marked improvement is perceptible, but, looking over a period of ten or twelve years, the progress that has been made is quite evident and gratifying. The character of the discipline is more satisfactory than it was in former years. I did not hear a single teacher using a harsh or disagreeable tone of voice. Sweet, encouraging, sympathetic tones were almost universal. I found only one or two pupils undergoing punishment, and in those cases the punishment was not what would be called very severe, the delinquents only being required to stand on a bench or chair. In one case corporal punishment had been inflicted upon a boy just before I entered the school.

Almost everywhere the teachers had evidently taken much pains to secure personal cleanliness on the part of their pupils. In one or two districts there were exceptions in this respect, suggesting the need of a little more liberal use of soap and water and hair-brushes, or combs. The schoolrooms were, almost without exception, clean and neat; one, however, is quite distinctly remembered as indicating a scarcity of brooms, but justice to the teacher requires me to say that she was teaching her pupils with great efficiency. A great many of the schoolrooms were ornamented with plants, which gave them an air of cheerfulness and elegance.

We have many teachers whose excellence is worthy of the highest praise. It is hardly possible to overestimate their value. They afford worthy models for the imitation of others. Often I call up the beautiful images of their schools. But there is one school of surpassing merit, which just now I remember with the greatest pleasure. The building where it is accommodated is by no means the most attractive; the children do not come from the most comfortable homes. And yet, how bright and lovely the school appears! It would be hard to say wherein it could be made better. The teacher is mistress of the situation. She does not fret or worry herself; she neither com-

plains nor apologises. She does not work harder than many others, and her work seems comparatively light to her, because she loves it. She has tact and a genial disposition. She loves her pupils and they love her. She is firmness itself, but she is as gentle as she is firm.

Writing is not generally so well taught as it might be. The children are too frequently put to writing spelling lessons and sentences before they know how to form the individual letters. The chief aim in the slate-writing in these schools should be to train the pupils to make each letter in a fair and handsome form and with a good degree of facility. There is one school where this has been done faithfully and skillfully for many years, and the pupils show the good results of the system after they go up to the grammar schools. Of course, I do not mean to say that primary pupils should not write words and sentences, but that they should first be well grounded in the *forms of the individual letters.*

In many schools there is room for improvement in the teaching of numbers. Too much time is wasted by the pupils in writing numerous tables of figures on their slates. The instruction in this branch is too abstract. There are not teachers enough who know how to use to advantage the ball-frame and other visible illustrations, and so the scholars are not taught *ideas* of numbers as much as they should be. Here is a case where, in my judgment, the prescribed text ought to be used more than it is. The book is so well planned that it may be safely followed in regular order from beginning to end. It is not necessary to require the pupils to study it much, but they should stand up in class and read and perform the questions until they can do so with facility.

The teachers generally have, I think, a good idea of what reading in primary schools should be; but all do not know how to reach the result which they aim at. They do not know how to economize time by making the minds of all the pupils work on the exercise while in class. The class is called out and kept standing until each pupil in turn reads a sentence or paragraph. This is done once a day, possibly twice. Very little comes of it. The advantage of classification is not utilized. The instruction, what there is of it, is almost wholly individual, because, for the most part, by this method only one mind works at a time.—*From Supt.* PHILBRICK'S *Semi-Annual Report.*

EDITORIAL DEPARTMENT.

—— One of our educational exchanges keeps the announcement at the head of its book table, that "no notices of books are ever inserted in this department, for which a price is paid." This seems a good deal like a grocer's advertising that he does not sand his sugar, or a man's wearing the placard in his hat, "Behold an honest man." What school journal does insert book notices for which a price is paid? We have never thought of receiving pay for a book notice, and, what is more, no honorable publisher has ever offered to pay us. We do not suppose that our experience is exceptional. One of our eastern contemporaries formerly claimed all the independence and honesty employed in reviewing school books, but its claim long since became quite ridiculous. We prefer to let our book notices speak for themselves, feeling assured that their independence and candor need neither be claimed nor proclaimed by us.

—— Professor Young's account of the official inspection of three Badish schools gives a very clear idea of their character. These inspections indicate the course of instruction and, to some extent, the methods of teaching. One of the most obvious features is the attention given to language, including composition and grammar. Sentence-writing is begun the first year, and the writing of letters receives early attention. Grammar is begun quite as early as in American schools, but is taught orally. Another noticeable feature is the attention given to practical and scientific information, including the elements of natural history, physics, etc.—all taught orally and largely from the industrial and home standpoint. We judge that the instruction in reading, arithmetic, and geography is not as thorough as in the better American schools. The tests in geography, reported by Prof. Young, are all *local*, which would be an unusual procedure in the examination of an American school. Our best teachers are, however, beginning to see that the geography of the pupil's own neighborhood and state is the true *starting* point. The increasing attention now given to language and to the elements of the natural sciences in American schools will soon put them on an equality in these branches with the best German schools. Prof. Young's paper reveals too many contrasts between the common schools of Baden and those of the United States for the limits of a single paragraph, and we forbear.

—— The paper in this number on the study of geology in public schools will be read with satisfaction by all who are interested in the more general introduction of instruction in the natural sciences in elementary schools. It is generally agreed that such instruction should be oral in all grades below the high school, and that it should be based on the actual observation of nature. The true order here is first observa-

tion, then reasoning; first the facts, then their explanation. The study of geology should begin, as Prof. Andrews states, with the facts "under the feet" of the pupils, and from these observed facts as a starting point the way opens to the whole science. This is clearly the work that should be done in our lower schools, and especially in our country schools. The children must be trained to use their eyes and gather facts, and be interested in their explanation. It is true that this is but a beginning, but it is a good beginning, and, if our lower schools do no more, they will do much. But they can easily do more. When pupils have themselves gathered specimens of rocks and fossils and studied them, they will be interested in specimens obtained in other localities. A knowledge of the geology of their own neighborhood will enable them the better to understand the geology of other regions. But our special purpose in referring to Prof. Andrews's excellent paper, is to indorse what he says respecting our text-books on geology. There is a demand for a manual which shall give due prominence to the geology of the United States, and especially of the central portion of the country; and we know of no man better qualified to prepare such a work than our worthy contributor.

——Mr. Lind's paper on the management of teachers' institutes was received before the issue of our May number, but too late for insertion. It was, therefore, written without any reference to our May editorial on the same subject. We take the liberty of adding that we see no reason for changing our views. We have often heard of the plan of "drawing out" improved methods of teaching and management from the members of an institute, but we have never seen it successfully done, though we have seen the attempt made in several normal and training schools, and in a few institutes. The answers in each case were "drawn out" of perhaps half a dozen pupils, and these often hit so far from the mark, that the instruction was badly scattered. We do not say that the thing can not be done, but we would go some distance to see it done. We have, of course, seen English grammar, arithmetic, and other branches of study taught in this way, but instruction in the principles and methods of teaching is quite another task. We agree with our contributor that there is too much direct and formal lecturing in our county institutes, and that these lectures are too often of little practical value to inexperienced teachers. We also believe that an institute lecturer should very often put questions to those whom he is instructing, and that each lesson given should be thoroughly reviewed by questions. All lectures and no lectures, and all questions and no questions are alike extremes in institute management. The true practice, in our judgment, combines these methods. We repeat what we said last month of the notion that the instruction of an institute should be given by its members; and we are quite willing to put our views to a practical test by conducting an institute over against one conducted on the other plan, leaving the comparative *practical value* of the two to the decision of country teachers.

—— The *Indiana School Journal* for May has a well-considered editorial on the comparative value of long and short articles. It reaches the sensible conclusion that the length of an article should be determined by the nature of the subject and the end sought in its treatment. The practical value of an article does not depend on its length, but *on what it contains*. When an article has more sentences than thoughts and more paragraphs than points, it is too long whether it fills one or ten pages. Any article is too long if it can be shortened without the loss of an important relevant idea. Measured by this principle, the contributed articles in our educational journals are often too long. Many of them are over-elaborated. It is a very difficult thing to discuss educational topics in brief paragraphs, and few writers succeed in the attempt. We recently read a number of an educational journal containing a score or more of "boiled-down" statements on teaching and school management, and nearly every one of them needed qualification. It is easy to write a specific direction for treating a given case in school discipline, for example, but the proper treatment may depend on circumstances which make the brief prescription all wrong. The truth seems to be this. There is a place in an educational journal for both the thorough article and the pointed, terse paragraph, and that journal is best edited that contains them *in due proportion*. We wish each number of this journal to contain at least one paper which thoroughly discusses some important subject.

—— Supt. Harris, of St. Louis, states in his last report, that the system of corporal punishment in schools is likely to go out of use altogether before the close of the present century. He thinks that suspension from schools as a means of punishment, is based on the sense of honor in the pupil, which is developed earlier and earlier with each succeeding generation, and also on the desire of the parent for the culture of his child, which secures his coöperation. To the argument, "Would you turn a child out upon the street when a sound whipping might reform him?" he replies (1) that a suspension generally secures the parent's coöperation to such an extent that the pupil is reformed, and (2) that the attempt to force all children, good and bad, into obedience by corporal punishment drives away from school three pupils where one is excluded by suspension. He urges that the suspension should be made permanent only in cases where the pupil has been shown to be incorrigible and to exercise a dangerous and corrupting influence on his fellow pupils, such pupils being expelled even where corporal punishment is most used. "Municipal authority", he adds, "in the shape of truant and vagrant regulations must be relied on to supplement a mild school discipline, and special reform schools in which the spirit of military discipline prevails, will train into mechanical habits of obedience those who are morally too weak for the common school." We referred last month to the statement of Supt. Kiddle, of New York, that the increase of absenteeism in that city is the result of the experiment of "moral suasion", backed by the suspension of pupils who can not thus be controlled. Which is right?

—— We do not share the fear of some that the teaching of German in our public schools will Germanize or, to use the stronger word, de-Americanize the pupils. With nearly as much reason, it may be claimed that the study of Latin de-Americanizes students. But while we are in favor of teaching German in public schools, we can not approve of the organization of separate schools for German children. The highest interests of the nation forbid the breaking up of the public school system into separate systems for Protestants, Catholics, Jews, Germans, Swedes, French, Chinese, etc. The public school is the great agency for the Americanizing of all who are to share the rights and privileges of American citizens, and, to this end, it should be a *common* school. We also object to the recent proposition that all German-speaking children be taught *exclusively* in German for the first two or more years. English is and is to be the language of America, and it should be the essential, prescribed language of the public school. If pupils are to be taught in only one language for a time, that language should be the English. Let German be taught in addition to English, but it should not take the place of English. All that any German parent can reasonably ask is, that the public school make provision for teaching his child to read and write, possibly to speak, the German language.

—— A writer in the *Western Weekly*, Ia., objects to written examinations because they occasion "cramming", with the attendant evils of over-study and nervous exhaustion. He states that girls especially often come out of the examination ordeal with the nervous system utterly prostrated. Is there not some truth in this objection? When the class standing and promotion of pupils depend on the results of these examinations, the more excitable are certainly subjected to a pretty severe nervous strain. This evil is often aggravated by the teacher's making much ado over the coming test, with a view of inciting the pupils to greater diligence. An ambitious and earnest teacher can easily "work up" an intense excitement in a class over an examination, which, unfortunately, always affects those pupils most who need no such stimulus. The cracking of a whip over a team always most urges the free horse. In the use of incentives in public schools, the fact is too often overlooked that girls as a class are more easily incited to over-exertion than boys. They are also more nervous, and hence suffer most from school requirements. Is it not possible to make written examinations less exciting and exhausting? The evil of special cramming may be obviated by having the examinations occur without previous notice. The per cents reached might not be as high, but they would better indicate the results of daily study and instruction.

—— The practice of marking the recitations of pupils has been discontinued in a considerable number of schools in Ohio, and written examinations, usually occurring monthly, have been substituted to determine the pupil's progress. We have taken some pains to ascertain how this

change has effected the daily preparation of lessons. The general testimony is, that the examinations are as effective an incentive to study as the daily record, while the greater freedom of both teachers and pupils has improved the character of the recitations. The teachers are less narrow and text-bookish in their instruction, and they give increased personal attention to those pupils who are not doing satisfactory work. Much, of course, depends on the spirit of the school and the manner in which the teachers do their work. When the time of examinations is announced several days in advance, and the intervening time is devoted to the special preparation of the class for the ordeal, pupils learn to depend on this cramming, and there is less faithfulness in daily study. Examinations are most constant and effective as an incentive when they are held without previous notice and are made a test of the pupils' daily work. They are a poor incentive when the vigorous crammer stands higher than the faithful student.

—— The educational department of the *Lewisburg Chronicle*, Pa., contains an article by Prof. M. W. Cramer, on the anti-grammar movement, in which it is maintained that English grammar as a science rests "on enduring foundations, logical and psychological" and that it should have a place in the course of study in our common schools. "There is", says Prof. C., "a somewhat general concurrence of opinion that it should occupy a more advanced place in the course of study than that hitherto assigned it, other means being relied on for the first steps in language culture. It is worthy of remark, also, that a very just discrimination is made as to what parts of grammar should be studied at different stages of the pupil's progress, exercises in distinguishing the parts of speech and their modifications, constituting the first lessons, and the structure of sentences, furnishing an appropriate subject for the powers of abstract thought at a less early age." These statements are well considered.

—— At the suggestion of Hon. James A. Garfield, of Ohio, Professor Hilgard, of the Coast Survey, has made a series of calculations to ascertain the centre of population in the United States by the four last censuses. He finds, says Mr. Garfield, that in 1840 this population centre was at a point in Virginia near the foot of the Appalachian chain and near the parallel of 39° N. latitude. In 1850 this centre had moved westward fifty-seven miles across the mountains, to a point nearly south of Parkersburg, Virginia. In 1860 it had moved westward eighty-two miles, to a point nearly south of Chillicothe, Ohio. In 1870 it had reached a point near Wilmington, Clinton county, Ohio, about forty-five miles north-east of Cincinnati. In no case has it widely departed from the thirty-ninth parallel. Professor Hilgard has also found that a line drawn from Lake Erie, at the north-eastern corner of Ohio, to Pensacola in Florida, would divide the population of the United States, as it stood in 1870, into two equal parts. This line is nearly parallel to the line of the Atlantic coast.

THE CALIFORNIA EXPERIMENT.

We have called attention several times to the importance of adopting a course of study for the ungraded schools of country districts, expecting that the feasibility of such a course would be tested in schools favored with county or local supervision. We have kept an eye on the school journals and official reports of the states having county superintendents, hoping to see accounts of the successful trial of the plan, but we have been disappointed. We have seen reports on the subject by committees of teachers' associations and institutes, and in several counties, Miami county, Ohio, being one, the teachers have arranged a course of study, and recommended its adoption by the local boards of education. The little information received by us indicates that these recommendations have not been favorably acted upon to any great extent. For some reason, those who have the immediate management of country schools seem to have little faith in their better classification or more systematic instruction.

These discouraging facts had somewhat shaken our confidence in the feasibility of the plan we had advocated, and we were not much surprised when a committee of the Indiana State Board of Education, appointed to prepare a course of study for the ungraded schools of the state, reported its inability to perform the task, assigning as reasons, (1) "The inequality in the length of school terms", (2) "The shortness of the terms generally", (3) "The inexperience and inefficiency of many of the teachers", and (4) "The want of thorough, systematic, intelligent supervision of the schools." While these reasons indicate that there is difficulty in adopting a uniform course of study for the schools of an entire state, they reassured us in the opinion that the adoption of such a course by local school officers is both desirable and feasible. We regretted that the committee did not take the average length of school terms as a basis, and prepare a course, to be modified to adapt it to the circumstances of each locality. A course of study, approved by the State Board of Education, would doubtless have been adopted in a number of townships, and its practicability tested by actual trial.

But the State Board of Education of California has assumed the task declined by the Indiana Board. It has adopted and prescribed a uniform graded course of study for all the schools of the state. The law makes it the duty of county superintendents, local school trustees, and teachers to enforce the prescribed course, and due notice has been given that the provisions of the law will be executed. This is a bold movement, and, if successful, California will have the honor of settling the feasibility of a definite course of study and instruction in ungraded schools.

The course of study adopted by the California Board, divides the pupils in the lower schools into three grades. The third or lowest grade has four divisions or classes, and the second and first grades have each two divisions—the eight divisions corresponding, we suppose, with the first eight school years, from six to fourteen. These three lower grades

are followed by an advanced or high-school grade, with three divisions or classes.

The course includes both the text-book and the oral instruction for each division or year, and not only the matter but also the *method* of the instruction is prescribed. For example, under the head of reading, in the primary division, we find this direction: "Word method to be used exclusively, according to instructions given in Calkins' *Object Lessons*, page 288, *et seq.*" We have little faith in prescribed methods of teaching, but the California Board has, and it proposes to test its faith by works. The course of study is to be accompanied by a manual (now in preparation), giving full instructions and directions in regard to methods of teaching, grading, classifying, and examining.

The course of studies is, we judge, well arranged. The course for the first division includes reading, spelling, printing, arithmetic, object lessons (definitely prescribed), and language (oral). In the second division writing is substituted for printing, and composition (sentence-making) and local or home geography are added. This course is continued to the sixth division, when grammar (oral) is added. The course for the seventh and eighth divisions includes reading, spelling, penmanship, arithmetic, physiology (oral), natural philosophy (oral), composition, grammar, geography, and the history of the United States. The advanced course includes nearly all the branches of study usually taught in high schools.

We must wait for the appearance of the promised manual to ascertain how this course is to be carried out in ungraded schools. We confess that we do not see how it can be done, if the divisions or classes are to be kept distinct and separate. An ungraded school of forty pupils will have eight distinct classes, and each class will have, on an average, seven recitations or exercises, and, if penmanship, composition, and the oral lessons generally be taught to the pupils in grades, instead of divisions, the number of classes will still be too great for one teacher. We suspect that the difficulty will be solved by having *daily* recitations in only a part of the branches and by uniting the divisions or classes, as is done in the schools of Germany, where the instruction is chiefly oral, and the attendance of the pupils regular—two important conditions.

But we will not anticipate the action of the California Board. It means business, and the steps already taken make it necessary that the succeeding ones be carefully and wisely taken. The real difficulty in the way is not yet reached, and, when reached, it will take time and experience to overcome it. Meanwhile all who are interested in the management of ungraded schools, can act upon a few settled facts—

1. The large increase in the number of studies necessitates a decrease in the number of recitations daily or weekly in each study. When reading and spelling were the only recitations conducted by the teacher, the classes could read and spell twice, and the lower classes even four times a day. The forming of classes in arithmetic, geography, and English grammar made necessary a reduction in the number of recitations in reading and spelling—a fact not yet recognized in thousands of our

country districts. Parents still insist that their children must read and spell as often as they did when they attended school.

2. The large number of branches of study now taught in public schools necessitates *a uniformity of text-books.* A diversity of text-books multiplies classes, and hence unnecessarily consumes the time of the teacher, prevents thorough instruction, and wastes the time and opportunity of the pupils. It is true that a skillful teacher can, with some loss of time, teach pupils using different text-books in arithmetic, geography, or grammar in the same class, but the great majority of teachers can not do this successfully. A multiplicity of books breaks their classes into fragments.

3. The selection of the studies to be pursued by each pupil, the rate of advancement, and promotion to higher books and classes *must be regulated by the school authorities.* All experience shows that there can be no economic or systematic classification of ungraded schools so long as the studies pursued, the books used, and the rapidity of progress are determined by parents and pupils. In the absence of a systematic course of study and a definite condition of promotion, teachers must be held responsible for thorough work, and there must be a sustaining authority back of them. The fact that many of our country schools are "run" by the wishes of parents and the whims of pupils, accounts in part for their inefficiency.

THE NEW OHIO SCHOOL LAW.

The school law, passed May 1st, 1873, is a complete codification of all the school laws of the state then in force, general and special, with such changes as were deemed necessary for their unification, and with sundry additions and modifications designed to increase the efficiency of the school system.

The great length of the act forbids any attempt to give a complete analysis of its provisions. It divides the state into five classes of school districts, styled respectively city districts of the first class, city districts of the second class, village districts, special districts, and township districts. Cities having a population of 10,000 or more by the census of 1870, are city districts of the first class, and all other cities are city districts of the second class. Incorporated villages, with the territory annexed for school purposes, are village districts, and townships, exclusive of any territory included in any other school district, are township districts. All other school districts now existing, whether organized under a general or special law, by a vote of the people or otherwise, are *special* districts. No provision is made for the organization of *new* special districts, and those now existing may be disorganized by a vote of the people. It would have been a good thing if the law had abolished all these special districts.

The law makes full provision for the organization of each class of school districts, great care having been taken to change as little as possible their present organization. Boards of education in city districts of the first

class may consist of one member or two members for each ward; in city districts of the second class, of three or six members or one member for each ward, and in village districts, of three or six members. We regret to say that the law retains the mongrel, complicated, and inefficient organization of township districts, which for twenty years past has been the most serious defect in the Ohio school system. Provision is, however, made for the organization of township districts on the plan of village districts by a vote of the electors at a regular election of township officers, the board of education being authorized, and on petition of one-third of the electors being required, to submit the question with due notice. We do not expect that many townships will make this change, since it does away with all sub-district directors. It will be generally claimed that there ought to be one member of the board near each sub-district school, and charged with its special oversight.

The more important of the other new provisions of the law are as follows:

Boards of education in cities are made entirely independent of the city council. They can purchase sites, build and repair schoolhouses without let or hindrance of the "City Fathers." This hitherto has not been true in several cities under special laws, and in all cities under the "Akron Law." In city districts of the first class, the board of education can anticipate the income of taxes for building purposes, not exceeding two mills on the dollar in any one year, by the issue and sale of bonds, and this may be done in city districts of the second class by a vote of the people, without limit as to the amount of tax levied.

Boards of education in all districts—city, village, township, and special—have power to levy an annual tax for school and schoolhouse purposes, not exceeding *seven mills* on the dollar. The state levy remains one mill.

Sub-district directors in townships have, as heretofore, the right to fix the wages of teachers, but such wages can not in the aggregate exceed the amount of money apportioned to the sub-district. In case the amount apportioned is not satisfactory to the directors, they can appeal to the county commissioners.

Boards of education may cause the German language to be taught in any public school, and such instruction is required when demanded by seventy-five resident free-holders, representing not less than *forty* pupils who wish and intend to study "the German and English languages together", but no provision is made for separate German schools. All branches taught in the public schools must be taught in the *English* language—a wise provision.

Superintendents and teachers may be appointed for a period of time equal to that for which the members of the board of education are elected—two and three years in most city and village districts—but the salary fixed can not be "increased or diminished during the term for which the appointment is made."

If any board of education shall fail to certify the necessary levies for school purposes, or to provide school privileges for *all* the youth of

school age in the district, or to provide for the continuance of every school at least six months in the year, it is the duty of the county commissioners to perform such duties.

The annual enumeration is to embrace all unmarried youth between *six* and twenty-one years of age, with a statement of the number between sixteen and twenty-one. The former school age was from five to twenty-one, though children under six were not admitted to the schools in most city and village districts. The return of an incorrect enumeration is made a misdemeanor, punishable by heavy fines; and whenever the State School Commissioner is satisfied that the number of enumerated youth returned is excessive or otherwise incorrect, he is authorized to cause the enumeration to be retaken at the expense of the district.

No person can be appointed or continue a school examiner, "who, as principal or teacher, is connected with or interested in any normal school, or school for the special education or training of persons for teachers." Does this apply to teachers in normal institutes?

The board of education of each city district of the first class may appoint a board of three, six, or nine examiners, with power *to examine the schools* and all applicants for a teacher's certificate. The examiners may receive a compensation for their services. A board of three examiners may be appointed in city districts of the second class and in village districts having a population of not less than 2500.

City boards of examiners may grant certificates valid for one, two, or three years, and certificates issued by county examiners are valid in city and village districts, when indorsed by the president and secretary of the board of examiners of such districts.

Every person applying to a city board of examiners for a certificate is required to pay a fee of fifty cents, to be set apart as a city teachers' institute fund. In city districts of the second class and in village districts this examination fee is to be paid to the county treasurer for the use of the county institute, except when the teachers of several such districts unite and form an association "for the professional instruction of the teachers of *graded* schools."

The teachers' institute fund can not be used to pay the expenses of any institute continued less than four days, and when no teachers' institute is held within two years in any county, the State School Commissioner is authorized to cause such an institute to be held, and to use the institute fund to pay expenses.

Boards of education in city districts of the first class are authorized to hold annually a teachers' institute, continuing not less than four days, and in case such institute is not held in any school year, the institute fund belonging to the city is required to be transferred to the county institute fund, and the city teachers are entitled to the advantages of the county institute. Boards of education of city districts of the second class and village and special districts have authority to appropriate the institute fund and other funds under their control to the support of an union institute for the teachers of graded schools, and they may permit their teachers to attend such institute "for one week without forfeiture of wages."

"Sec. 117. *Any teacher in any public school is hereby authorized to dismiss the school under his or her charge for the week in which is held the county teachers' institute for the purpose of attending the same, and such teacher shall not forfeit his or her pay for such week;* provided, such teacher shall deposit with the clerk of of the board a certificate from the secretary of the institute that he or she has been present at such institute for not less than four days; provided, that this privilege is not extended to teachers in c ty districts of the first class without the consent of the board of education thereof, and that no union or graded school shall be dismissed except when a majority of the teachers in such schools are in favor of such dismission." GOOD.

Teachers are authorized to dismiss their schools without loss of pay on New Year's day, the Fourth of July, Christmas, and on any day set apart by proclamation of the President of the United States, or the Governor of Ohio, as a thanksgiving or fast day. A school month consists of four school weeks of five days each.

County auditors are allowed a compensation for their services under the school law, not exceeding ten dollars a year for each school district.

County examiners are authorized to obtain the use of suitable rooms in which to conduct examinations, to employ a janitor, and procure fuel and light, the expense to be paid out of the county treasury.

EDUCATIONAL INTELLIGENCE.

—— ALL yearly subscriptions to the TEACHER beginning July, 1872, close with this number. A prompt renewal will secure a continuation of its monthly visits.——When notified that a subscriber has failed to receive any number of the TEACHER due him, we always remail it.

—— MRS. JOHN OGDEN has opened a Kindergarten in Columbus, O., with encouraging prospects of success. Mrs. O. has spent some time in Boston, mastering the principles and practice of Froebel's system, and it is her aim to establish a true Kindergarten.

—— LARGE public meetings have recently been held in Brooklyn, N. Y., demanding an educational reform. The city has no training schools for teachers, and is destitute of proper facilities for higher education. Thomas W. Field has been elected superintendent of the schools.

—— THE faculty of Harvard University has made arrangements for three courses of instruction for teachers in the elements of the natural sciences, to be given during the coming summer vacation of the schools. The instruction will be given by lectures and laboratory practice.

—— A LIBERAL friend of Marietta College has offered to give $50,000 to increase its endowment, on condition that $200,000 shall be secured, including the $70,000 of recent gifts. Additional donations to the amount of $80,000 will make available this very generous offer, and greatly enlarge the facilities of the college for usefulness.

—— Prof. Agassiz has established a "Summer School of Natural History" on Penikese Island, the summer residence of Mr. John Anderson, who has donated it for the purpose, with $50,000 in cash as the nucleus for an endowment fund. The school is for teachers and persons fitting themselves for teaching, and will open in July next. It is for both sexes, and no charges will be made for tuition.

——At a late meeting of the Northeastern Ohio Teachers' Association, the pupils of the Cleveland school for deaf-mutes, one of the public schools of the city, gave an interesting exercise in lip reading. The school has nine pupils, three of whom, aged about nine years, formed the class. In two years they had been taught to read the lips and to speak words so as to be understood by the audience. They recognized and uttered words spoken by the teacher standing in a remote part of the room, to the delight of those present.

—— The Legislature of Wisconsin has requested the State Superintendent to make such investigations and inquiries as he may deem proper in relation to compulsory education, and report the result, with such recommendations as he may see fit, to the next legislature. Supt. Fallows announces that he shall endeavor to make the report as complete as may be, and he asks for suggestions and information bearing on the subject.

—— Prof. David Murray, of Rutger College, N. J., has been appointed Superintendent of Education by the Japanese Government, and has sailed for Yeddo to enter upon the duties of his office. His commission states that he is to have "full charge of all affairs connected with schools and colleges in the Empire of Japan" for the term of three years. His salary is $10,000 a year in gold. It was generally expected that this position would be filled by Secretary Northrop, of Connecticut.

—— Chief-Justice Chase died in New York City, of apoplexy, May 7th, in the sixty-sixth year of his age. He began his active life as a teacher in Washington City, where he formed acquaintances and received impressions which gave direction to his future noble career. He leaves the record of a successful and spotless life as an inspiration to the young men of the country.

—— John Stuart Mill died in Avignon, France, on the 9th of May, in the sixty-seventh year of his age. He was not only a profound thinker and scholar, but he also possessed, in large measure, good Anglo-Saxon common-sense. His principal works are his treatises on Logic, Political Economy, Liberty, Subjection of Woman, and his criticism of Sir William Hamilton's Philosophy—the last being in the opinion of some his greatest work.

—— Dr. William H. McGuffey, the distinguished scholar, teacher, and author, died at his home in Charlottesville, Va., May 4th, aged seventy-three years. His boyhood was spent on a backwoods farm in Trumbull county, O., and at eighteen he borrowed books, and began his

preparation for college, walking several miles to recite to a ministerial friend, and supporting himself by teaching. He graduated at Washington College, Pa., in 1825, and was immediately appointed professor of the Ancient Languages in Miami University, O., and in 1832 was transferred to the chair of Moral Philosophy. He was president of the Cincinnati College from 1806 to 1839, and of the Ohio University from 1839 to 1845, when he accepted the chair of Moral Philosophy and Political Economy in the University of Virginia, which he filled until his death. Dr. McGuffey is most widely known as the author of the "Eclectic Series of Readers", whose extensive use and long popularity are unparalleled in the history of school books. For years the annual sales of McGuffey's Readers have averaged more than a million dollars. He had a work on mental and moral philosophy under revision when he was stricken down with the disease which proved fatal. His death is widely lamented.

National Educational Association.—The Thirteenth Annual Meeting of this Association will be held in Elmira, N. Y., on the 5th, 6th, and 7th days of August, 1873. The meeting will open on Tuesday at 10 o'clock A.M. The morning and evening of each day will be occupied by the General Association, and the afternoon by the four Departments.

An incomplete circular, issued by President Northrop and Secretary White, announces that no time will be spared for elocutionary or musical entertainments, and that the papers introducing the several topics are expected not to occupy more than twenty-five to thirty minutes each, to afford time for their thorough discussion. As an Educational Conference, the meeting should invite a comparison of the views of representative men from all parts of the country, and the need of condensation and brevity is commended to all who take part in the proceedings.

The exercises of the General Association will include addresses and papers by President McCosh, of the College of New Jersey; President Edwards, of the Illinois Normal University; President Jackson, of Trinity College, Conn.; Dr. Barnas Sears, Agent of the Peabody Fund; John Hancock, Supt. Schools, Cincinnati; President White, of Cornell University; E. E. White, of Ohio; and Prof. W. G. Atherton, of Rutger College, N. J.

The exercises of the Normal Department will include papers by President Edwards, of the Illinois Normal University; John W. Dickinson, Principal of the State Normal School, Westfield, Mass.; Miss Delia A. Lathrop, Principal of the Cincinnati Training School, and the discussion of several important topics. President Eliot, of Harvard University, and Prof. W. P. Atkinson, of the Mass. Institute of Technology, will present papers in the Department of Higher Instruction. The exercises of the Elementary Department and the Department of Superintendence are not yet announced.

We hope to publish the complete programme in our July number, with railroad arrangements. Free return tickets are promised by the New York & Erie and the other roads centering in Elmira. The hotels reduce their rates about one dollar a day, the Rathbun House charging $3.00 a day; the Frazer, Delevan, and Hathaway each $2.50; and the Lyon House, $2.00.

OHIO AND MICHIGAN TEACHERS' ASSOCIATIONS.—The following is the programme of exercises of the joint meeting of the Ohio and Michigan Teachers' Associations, to be held at Put-in Bay, July 2d and 3d, 1873:

Wednesday A.M., July 2d.

1. Opening exercises at 9 o'clock—Miscellaneous business.
2. Inaugural Address, by Pres. U. T. Curran, Sandusky, Ohio.
3. "Methods of Instruction in the Natural Sciences in Public Schools", by W. H. Venable, Cincinnati, Ohio.
4. Discussion of Mr. Venable's paper, opened by C. L. Hotze, Cleveland, Ohio.

Wednesday P.M.

1. "The Philosophic Study of Literature", by J. B. Angell, President of Michigan University, Ann Arbor, Mich.
2. Discussion of President Angell's Address, opened by Daniel B. Briggs, Supt. Pub. Instruction, Mich.
3. "Drawing in the Public Schools", by Arthur Forbriger, Supt. of Drawing in the Public Schools of Cincinnati, Ohio.
4. Discussion of Mr. Forbriger's paper, opened by John Hancock, Supt. of the Cincinnati Public Schools.
5. Miscellaneous Business.

Thursday A.M., July 3d.

1. "The Common School Historically", by Prof. D. Putnam, of the Michigan State Normal School.
2. Discussion of Prof. Putnam's paper, opened by Prof. E. Olney, Union, Mich.
3. Annual Address, by Prof. E. S. Morse, Salem, Mass.

Thursday P.M.

1. "What shall constitute a Proper Course of Instruction and Practice for Teachers", by Wm. Mitchell, of the Ohio Central Normal School, Worthington, O.
2. Discussion of Mr. Mitchell's Address, opened by Miss Delia A. Lathrop, of the Cincinnati Normal School.
3. "Preparation for the High School", by Prof. E. A. Strong, Grand Rapids, Mich.
4. Discussion of Prof. Strong's paper, opened by Duane Doty, Supt. of Public Schools, Detroit, Mich.; followed by E. H. Cook, Prin. of the Columbus High School, Ohio, and others.
5. Election of Officers; Miscellaneous Business; Adjournment.

The Put-in Bay House and the Beebe House, two large hotels on the island, will each entertain the members of the Associations (those holding certificates of membership) at $2.00 a day.

INDIANA.—The new county superintendency law fixes the salary of the superintendent at *four* dollars a day—a serious mistake, which it is hoped the next General Assembly may correct. The efficient administration of the system the first two years will be a necessary condition of such action. An amendment to the school law establishes the township system, with three school trustees, and the county superintendent and

the school trustees of the townships and of the town and city districts in each county constitute a county board of education, whose chief duty is to determine the text-books to be used in the schools—a provision designed to secure a uniformity in each county. A text-book adopted by the county board, can not be changed within three years, except by a vote of all the members.——The salary of the State Superintendent is increased from $1,500 to $2,000, and the annual appropriation to the State Normal School, at Terre Haute, is increased from $10,000 to $15,000, with $2,000 additional for contingent expenses. The school is reported to be in a very prosperous condition.——The State Board of Education has decided to conduct four State Normal Institutes this summer, and it is the intention to make them as nearly models of true institute work as possible. This is an excellent movement.——Mr. A. W. Jones, for ten years past superintendent of the public schools of Vincennes, and one of the leading teachers of the state, died of consumption early in March. R. A. Townsend has been appointed his successor, at a salary of $1,500. ——The public schools of Evansville have more than doubled their enrollment in five years, and the number of teachers has increased from 36 to 85. Six new buildings, with thirty-eight schoolrooms, have been erected. The character of the schools has also been greatly improved. ——The enrollment of the public schools of Fort Wayne for the term ending March 28th, was 1,077, with an average daily attendance of 843. The number of pupils over fifteen years of age was 149. The board has recently published a course of science lessons, and also a course of language lessons, both carefully arranged by Supt. Smart.——The board of education of Indianapolis proposes to erect four new school buildings this year, at a cost of $100,000.

Ohio.—The Executive Committee of the Ohio Teachers' Association has issued a circular requesting the superintendents of graded schools in the state to bring to the Put-in Bay meeting for exhibition a complete set of the examination papers of the pupils in the several grades, with the questions submitted. The papers must be the actual manuscripts on which the promotion of the pupils was made, and *all* of the papers of each grade or class must be included. There must be no omission of poor papers. The papers are to be arranged in topics, and the average age of the pupils in each grade is to be given. The papers will be exhibited under the supervision of the committee in a room set apart for the purpose. We learn that the superintendents of Cincinnati, Cleveland, Columbus, Toledo, and Tiffin have already signified their intention to comply with the request of the committee.

—— An unusual number of American teachers will spend their summer vacation in Europe, "Cooke's Educational Tour to Vienna" affording the opportunity to make the entire trip at an expense of $400 in gold. Those interested should apply to Cook, Son & Jenkins, 212 Broadway, New York.——Six of the present teachers in the Pittsburgh High School are from Ohio, and Supt. Luckey was once a successful Buckeye teacher.

BOOK NOTICES.

AMERICAN TEXT-BOOKS OF ART EDUCATION. First Series: Free-Hand Outline Drawing. In Six Numbers. By Prof. WALTER SMITH, State Director of Art Education for Massachusetts. Boston: James R. Osgood & Co.

This is the first of five series of Drawing Books which Prof. Smith is preparing for the use of American schools. The second series will present "Model and Object Drawing"; the third, "Plane Geometrical Drawing"; the fourth, "Perspective Drawing"; and the fifth, "Mechanical Projection and Drawing." The series of "Free-Hand Drawing" is made the basis of the system. We can not better describe this series than by quoting the publishers' statement, as follows:

"From the placing of points and division of right lines into equal and unequal parts, the pupil is carried through every phase of delineation,—the names, character, and shapes of angles, triangles, quadrilaterals, polygons, curves of general occurrence in art and nature,—up to the forms of objects of ornament and natural shapes. The most graceful contours in modern and ancient pottery, historical ornament, original design, and natural foliage are selected as the subjects by which to elevate the taste of the pupil whilst he is acquiring skill in drawing. Every variety of exercise is introduced,—copying the same size, enlarging and reducing from given examples, repetition of forms, designing of new combinations, inventive drawing, etc., etc., and the directions to the pupil are terse and exhaustive; at the same time the artistic faculties are sometimes appealed to by exercises which are only generally described."

We are not competent to express an opinion respecting the merits of the method of teaching drawing embodied in these books. We have not had time to examine it with care, and have had no opportunity of practically testing it. We know that it is the result of a wide and successful experience, and the lessons seem to be admirably arranged. The feature of printing the directions in connection with each exercise has been tested in writing books, and has been found helpful to both teacher and pupil. Such helps are certainly more needed in drawing books. We commend this series to the examination of all persons engaged in teaching drawing.

JOURNAL OF THE ANTHROPOLOGICAL INSTITUTE OF NEW YORK. Westerman Co., 471 Broadway, New York.

We have received the first number of this Journal, and find much in it to interest all who care to investigate the many questions connected with the earlier history of mankind. These questions are now becoming more and more matters of inquiry and investigation. In the Journal before us there are several interesting papers. Dr. M. Paul Broca's address on the Progress of Anthropology in Europe and America before the Anthropological Society of Paris, is a valuable outline of the discoveries already made. Mr. James W. Ward contributes an illustrated paper on the sculptured rocks near Barnesville, in Belmont county, Ohio. Another paper illustrates a curious method of trepanning in use by the Incas of Peru. Hon. E. G. Squier, the President of the Institute, contributes one or two valuable papers. He is widely known for his investigations relative to the Mound-builders of the West and to the early races of South America.

APGAR'S GEOGRAPHICAL DRAWING BOOK. By E. A. and A. C. APGAR. Philadelphia: Cowperthwait & Co.

The system of map-drawing presented in this work is substantially the same as that first published by the authors in 1865. The pupil is assisted by a geometrical diagram, so constructed as to coincide as nearly as possible with the boundaries of the map to be drawn, and yet so simple that it can be readily constructed and easily remembered. We are not competent to decide respecting the merits of this method, having never tested it, but its advantages in drawing the continents are quite evident. In drawing the states and other political divisions, we should prefer to use the lines of latitude and longitude. The work contains diagrams, with full directions for drawing the maps, and questions for testing the pupil's knowledge of the plan of the map and also of the topography of the country represented. It is handsomely published, which is true of all the works recently issued by this house.

GETTING ON IN THE WORLD; or, Hints on Success in Life. By WILLIAM MATHEWS, LL.D., Professor of Rhetoric and English Literature in the University of Chicago. Fifth Edition. Chicago: S. C. Griggs & Co.

We are not surprised that this book has reached its fifth edition since December last. It is one of the few books that deals with the practical duties of life in such a manner as to ennoble and beautify them. It is replete with wise suggestion and good counsel, but is remarkably free of didactic dryness and dull common-place. The style is fresh, attractive, stimulating. Many of the paragraphs are charming pictures. The book ought to be read by every young person who has the least aspiration to meet life's duties nobly and successfully. There is too much haste to be rich, too much sighing for great opportunities, too much waiting for good luck. The young need to learn that, as a rule, success in life is *earned.*

HALF-HOUR RECREATIONS IN POPULAR SCIENCE.—This is the title of a series of papers on popular science, issued in monthly numbers by Estes & Lauriat, Boston. Seven numbers have appeared, including "Strange Discoveries respecting the Aurora and Recent Solar Researches", by Richard A. Proctor, F.R.A.S.; "The Cranial Affinities of Man and the Ape", by Prof. Rudolph Virchow, of Berlin; "Spectrum Analysis Explained"; "Spectrum Analysis Discoveries"; "Nebulæ, Meteoric Showers, and Comets"; and "The Geology of the Stars" (No. 7), by Prof. A. Winchell. Papers by Dr. Carpenter, Prof. Huxley. Prof. Tice, and other eminent scientists are announced. It is the aim of the editor to publish no paper which is too abstruse or technical for the average American reader.

—— *The Educationist* is a new educational journal, edited and published by A. C. Shortridge and Geo. P. Brown, Indianapolis, Ind. It is issued in quarto form, sixteen pages, double-column, at $1.00 a year. It receives the subscription list of the *Public School Advocate,* which is suspended. The first number (April) is an assurance that *The Educationist* will be a live, progressive, and independent journal.

—— THE *National School Festival* is now published by Hutchins & Horton, East Boston, Mass. It is edited by T. A. Hutchins and Mrs. M. B. C. Slade, which is a guaranty that its character will be fully sustained. The next volume, which begins with the July number, will contain a Cold Water Temple department. The *Festival* is published quarterly, at 75 cents a year.

NEW BOOKS RECEIVED.

GOOD MORALS AND GENTLE MANNERS. For Schools and Families. By Alex. M. Gow, A.M. Cincinnati and New York: Wilson, Hinkle & Co. Price, $1.25.

CICERO DE OFFICIIS. LIBRI TRES. With Explanatory Notes. By E. P. Crowell, A.M. Philadelphia: Eldredge & Bro. Price, $1.50.

TABLES OF LATIN SUFFIXES. With Illustrative Examples. By Amos N. Currier. Philadelphia: Eldredge & Brother.

COLUMBUS, OHIO: Its History, Resources, and Progress. With Numerous Illustrations. By Jacob H. Studer. Columbus: Jacob H. Studer. Price, extra binding, $2.50; cloth, $1.50.

BURNS' PHONIC SHORTHAND, for Schools, Business Writing, and Reporting. By Eliza Boardman Burns, Editor of the American Journal of Phonography. New York: Burns & Co. Price, $1.00.

PHONIC SHORTHAND.—Chart I. By Eliza B. Burns. New York: Burns & Co. Price, heavy paper, 50 cts.; mounted and varnished, $1.50.

AMERICAN TEXT-BOOK OF ART EDUCATION. A New and Complete Series of Drawing Books for Use in Schools. Free-Hand Drawing. In Six Numbers. By Walter Smith. Boston: James R. Osgood & Co. Price, 15 cts. each.

THIRTY-SIXTH ANNUAL REPORT OF THE BOARD OF EDUCATION OF MASSACHUSETTS. Bound Volume. Pp. 346. Joseph White, Secretary. Boston: State Printers.

THREE FAVORITE TRIOS, for Male or Female Voices, with Piano Accompaniment. Dayton, O.: J. Fischer & Bro. Price, 30 cts.

SCHOOL REPORTS AND CATALOGUES.

Annual Report of the St. Louis Public Schools. 1871–72. Wm. T. Harris, Supt.

Second Virginia School Report. 1872. W. H. Ruffner, Supt.

Fourth Annual Report of the Public Schools of Richmond, Va. J. H. Binford, Supt.

Annual Report of the School Committee of Portland, Me. J. H. Coffin, Sec'y.

Report of the General Agent of the Massachusetts Board of Education. Abner J. Phipps, Gen'l Agent.

Fourth Annual Report of the Maryland Institution for the Deaf and Dumb. 1872. Charles W. Ely, Prin'l.

Course of Instruction in the Public Schools of Alliance, Ohio. W. H. Dressler, Supt.

Catalogue of Franklin College, New Athens, O. A. F. Ross, LL.D., President.

H. H. H. HUNTER'S HELPS TO HISTORY, or Historic Cards. Twenty Games sent by mail for 75 cts. Address D. ECKLEY HUNTER, Princeton, Indiana. ☞ See advertisement in April number of this journal.

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THE

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THE KINDERGARTEN—WHAT IS IT?

A Kindergarten is an institution of which people in general hear much and know but little. That the word means literally children's garden, and signifies some strange, foreign method of instructing children by turning study into play, is the utmost that the public gathers concerning it from the literature of the day. Some prejudice, even, attaches to the new system where it is but vaguely understood; it is supposed to be a pleasant substitute for real work, delightful to the childish temperament, but questionable as a means of instilling into it the learning of the schools. People who entertain the notion that a childhood, to be profitably spent, must be subjected to daily repression under the eye of the teacher, and take its revenges in lawless hilarities when once out of doors, distrust the new-fangled ideas that would seek only to develop, and not to oppose, the natural tastes. They recall with satisfaction their own early school days, when they passed their time mostly in dull inaction upon hard seats, enlivened now and then by a recitation, which consisted in standing at the teacher's knee, in great discomfort of mind and body, and drawling out the names of certain printed figures called letters, to which an awful penknife directed their eye. School appeared to them then as a place of penance from which their souls revolted, but to which they were driven merely because it seemed the thing most contrary to their wishes; and this is the aspect which they believe it should ever wear to the infantine mind.

But a pedagogue has risen in these latter days who insists that this process is wholly wrong; that it aims to train only one portion of our nature, and does that but poorly, and that its methods are calculated to disgust a child with learning at the very start. Rousseau, indeed, had uttered the same protest long before, vehemently, and with many fierce denunciations of the follies of his age. The world listened, admitted that he was more than half right, but laughed at his glorious chimeras, and still kept its tender youth bent over their primers and pothooks. Pestalozzi listened, and, following his bold lead, reduced to successful practice many of the principles thus declared. But there was much for him to perform; he could confine himself to no one period of life. Friedrich Froebel, a younger man than he, and at one time his pupil, realizing that the bent of the mind and character is given in the earliest years, set himself the task of evolving a course of training for the youngest minds. He spent a lifetime in studying the natures of children, and the best means of training their varied faculties; and when he died, in 1852, he had perfected a system full and harmonious, and had thoroughly tested its efficiency. It is this which is now claiming the attention of parents and instructors under the name of the Kindergarten.

The first stage of education is all that it aims to affect; with later work it has nothing to do. It must not, therefore, be confounded with object lessons, which are deservedly gaining a place in all schools, even the highest. The latter are an outgrowth of the same principles upon which the Kindergarten is founded, but they are disjointed exercises that may be grafted upon any process of study, at the pleasure of the instructor; the former is a system complete in itself, that makes no compromise with the old practices, but sets them utterly at naught, and assumes the entire control of the pupil's mind, during the first years at school.

That it is entirely unlike our present method of teaching the elements of education will be evident from a few statements: And first, while our public schools are commonly forbidden by law to receive pupils younger than four or five years of age, the Kindergarten system makes it desirable, and almost necessary, that pupils should be entered at the age of three years, and often they are admitted even younger than that. At the age of seven they have completed the instruction of the Kindergarten proper, and are ready to pass on to higher schools.

Second. Although the child is supposed to be at the Kindergarten for four consecutive years, he is not taught his letters there, and has no need to use them, as he never sees a printed book in the hands of teachers or scholars during the time. As a special favor to parents, he may sometimes be allowed to learn the alphabet and simple reading, just before he leaves, to prepare him for the education that awaits him elsewhere, but this forms no part of the Kindergarten system itself.

Third. In the place of text-books, he has a great variety of materials given him to work with; and from these, used with care and method, under the eye of the teacher, he learns not only the elements of many branches of study now taught in our higher schools, but also the first steps in several trades and artistic pursuits. Of these materials and the mode of their use we shall speak more fully hereafter.

Fourth. Our present schools seek to repress all activity in young children during school hours, keeping them to desk and chair during the whole session, except at recess, and forbidding freedom of movement as detrimental to their progress; but this system recognizes the natural love of activity in children as good, and essential to their health and well-being. Instead of repressing, it endeavors to turn it into proper channels, and to make of it one of the chief agents for the instruction of its pupils.

Fifth. In all its exercises, it aims especially to train the eye as a means of informing the brain, and to endow it, early in life, with the power and habit of close observation upon objects that come before it; for it holds this to be the principal source from which knowledge is obtained, whether it be from the life around us, or from an accurate study of the printed page.

Sixth. While the eye is trained to nice discrimination, the hand is practiced in many dexterous employments, that it may be fitted to manipulate different materials with accuracy and ease. The Kindergarten recognizes the dignity of labor, and insists that its pupils shall not only know but do, that not only their receptive but their constructive faculties shall be taught and developed. It holds that the present mode of conveying instruction tends to enervate and to undervalue the physical powers, to induce laziness of body, and to disjoin two things which should always be united—thinking and acting.

Seventh. It encourages children to investigate for themselves, and to see and verify whatever the teacher tells them to

be true. When a statement is made concerning any object, the object, if it be possible, is placed before them, that they may fully comprehend and believe. The mere memorizing of facts which other people have discovered, is regarded as tending toward servility of mind and a lack of self-reliance, and is contrary to the spirit of its teaching. The time has not yet arrived for the student to acquaint himself with the past labors and the accumulated thought of mankind.

Eighth. It believes a love of beauty to be native to all, and a source of great happiness and culture, if rightly trained; and in all its occupations the development of this is made one of its chief purposes. The harmony of colors and the charm of their contrasts, the symmetry and grace of form, about which so many adults are now lamentably ignorant, are taught in a way never to be forgotten.

These, as far as we understand and can state them in brief, are the striking peculiarities of this new system. We might speak of many other features, but these are sufficient to prove that here is something original, at least, in its conception, and striking at the very root of all our old processes of inducting children into knowledge by means of the A B C's and the spelling book.

Let us consider more minutely the means and the materials by which its lessons are conveyed. We will enter one of its schoolrooms, and observe the pupils at their work. And, first, we may remark that a Kindergarten is not commonly a garden at all, though Froebel would make this a part of his plan, but a large room, one portion of which is filled with small desks and the other left empty for plays. We find the little scholars at their desks, with a square piece of white paper lying before them. They are beginning their lesson in Geometry, though they probably do not know the meaning of that word, and only call it folding paper. The teacher, standing before them, questions them about the shape of this square, about its lines and its angles, and afterward directs them to place it with a side toward them, parallel to the edge of the desk, and to fold, it may be, the right lower corner over the left upper corner. She watches to see that each one does this exactly, and without direct assistance. Then they are asked about the triangle they have thus formed, the number of its sides and angles, and what kinds of angles are found in its different corners. They open the papers again, and observe how many triangles were made

by the creased line, and how this line divided the whole space and two of the angles. The square is folded also with side against side, making two oblongs, and the changes thus made are noted. Other foldings into smaller squares succeed, giving rise to repeated questions and answers. Finally, the children are allowed to make of the paper, now creased in many regular lines, any fanciful object they choose, and each one constructs for himself a table, a box, a bird, or a house. This finishes the exercise, and they rise for a play. There are many of these plays, pretty little inventions, such as only a German mind could conceive, and in them the pupils usually sing together, either in German or English, tossing a ball, perhaps, and counting; or they run and skip, or depart on imaginary travels and return to relate their adventures.

This over, they begin another exercise at the desk. If it is Arithmetic, the announcement is hailed with great glee, for it is their favorite study. They count tiny wooden sticks, that are given to them tied up in bundles of ten, and from their experiments with them they learn the four elementary rules. Boxes of cubes, divided in various ways, form part of their materials, and show them the relations of solids. With two squares of colored paper cut into fine slits they weave many beautiful patterns; on perforated card-board, with bright worsteds, both boys and girls learn to sew and to embroider; they draw simple lines, and prick the outlines of pictures on blank paper, and, in clay, they model simple forms. But space would fail us to describe the varied means by which the eyes and minds of the children are kept alert and interested, and their bodies unwearied and active, while they are learning the elements of so many pursuits. All seem happy in their work and courteous to each other, and, in their games, full of fun and spirit, properly controlled. There is no unnecessary noise; no one speaks without permission, but all inquiries are encouraged and patiently answered. It is only the forenoon that is thus spent; in the afternoon they are free at home. School is a pleasure to these pupils and not a torment, and great and unusual must be the attraction which can induce them to stay away.

Thus it will be seen that the Kindergarten adapts all its processes to the nature of the child. He lives and delights in the visible world—it appears to him full of novelty and charm; the abstract is as yet beyond his comprehension. The letters of the

printed page are only representations, and not the real things; he can not yet understand their value, and turns to them with indifference. Learning, to attract him, must address itself to his perceptions; for, while his reasoning powers are still dormant, his senses are all alive, and the actual objects that surround him are viewed with the keenest interest. He must see first; afterward he will think.

The advocates of this new system claim for it extraordinary merits, and we believe they are not exaggerated. A long and practical acquaintance with schools leads us to be wary of many of the changes so freely proposed on every hand, but this stands the test of close study and examination. We have read its literature, heard lectures from its expounders, conversed with its teachers, and visited its schools; and the result has been to convince us that it is a true and efficient method of starting children in life with a zest for knowledge, a body active and serviceable, and senses quickened and trained. When, in later years, the pupil will have to submit to much laborious study, as a discipline for his mental powers, and to grapple alone with many problems of thought, he will find himself well equipped for the work by that early awakening and wise direction of his powers which the Kindergarten has given.

* * * * * * When once America has acquainted herself with their worth, it must be that she will give Kindergartens a hearty indorsement, and proceed to adopt them as the most valuable of infant schools. They are already taking foothold among us, and winning able converts. Private institutions, more or less in conformity with the true Froebel idea, succeed in many places; and some of the larger cities support four or five.

But so long as Kindergartens remain private schools, with the price of tuition fixed at from sixty to a hundred dollars per year, they will be of little real importance. It is only as a part of our common school system that they can produce any considerable results. The city of Boston has already shown her desire to test their merits, and for the past two or three years one has been maintained at her expense, under the supervision of a Special Committee. This Committee, in all their reports, declare the experiment to be a success, and express their warm approval of the work this school is effecting. St. Louis has just added one to her department of Normal School instruction. Other communities will be led, in time, to follow their exam-

ples; and when the value and practicability of Kindergartens are once made clear to the general public, we can not doubt that they will become established everywhere as a new grade of our Common Schools, intended to precede the Primary Schools, and to take from them one year, or more, of their present course. Our towns and cities will then be called upon to begin the education of their children at three years of age, instead of four or five. This will require a considerable addition to the school funds; and here the first practical difficulty in the way of the immediate establishment of these schools is met. Our ablest educators begin to concede their efficiency, and to admit that competent teachers in sufficient number can soon be trained by the superior instructors already amongst us; but they question whether the public voice will approve the additional outlay which will be required. If it will not, it is only because there has been, as yet, no sufficient opportunity for learning the value of what this outlay will procure. Our American people do not need to be told that they can afford to retrench in all things save in education; and that there they must be lavish with their money and unsparing with their pains, if they would not render their republican government a failure, and their own individual lives a series of awkward experiments. They know that the faculties of the citizen, when rightly trained, bring to the state its greatest wealth, and that it is cheaper to instruct children than to maintain paupers and convicts.

Our prisons, houses of correction, and reform schools are but the acknowledgments in brick and stone of our past blunders in educating our youth. It were better to give the small urchins of our worst quarters a right start in life, compelling them to attend a school such as this, and imbuing them there with a love of study and work, than to allow them to drift about among the haunts of wickedness, to learn sin and practice vice, and then to pour out our money, after they are grown, in trying them for misdemeanors before our courts, and in guarding their useless lives in prison for the greater part of their days. Kindergartens must in time be recognized as the first step in this great work of bending all the faculties of all our youth toward virtue, toward productive labor, and toward unselfish devotion to the general good. When we are wise enough to train the twigs aright, we shall not need to wrench back and straighten the crooked trees. A. G. W.

EDUCATIONAL NOTES.

No. IV.—The Teacher Should Understand the Nature of Knowledge.

Methods of Instruction, as previously stated, embraces three general divisions—*the Nature of Mind, the Nature of Knowledge, and the Nature of Instruction.* To work with skill, a teacher should understand each one of these three divisions. In a previous article, I presented some reflections upon the importance to the teacher of a knowledge of the nature of mind. In this article I wish to present a few thoughts showing the advantage to the teacher of a more thorough understanding of the general nature of knowledge.

A teacher should understand that which he teaches. No one is qualified to teach that which he does not understand. To attempt to communicate to others that of which we ourselves are ignorant, is a good example of the blind leading the blind. This is so evident that even to state it may subject one to the criticism of repeating old saws. But the proposition, in my mind, is more comprehensive than appears on the surface. What I mean by understanding the nature of knowledge is more than being familiar with the branches as presented in our text-books. A teacher ought to understand the general character of knowledge, the materials of which it is composed, and the relation of the several branches to each other and to the human mind. Let me make this clear by a few details.

1. *A teacher should understand the general nature of knowledge.* This is necessary that he may see the relation of that which he finds in books to that which the child learns outside of books. He should understand the relation between common and scientific knowledge, that he may link the one to the other in his instruction. There is in many a schoolroom an impassable chasm between the intellectual life of pupils within the school and without it. The matter of the lessons in school being completely divorced from the out-door experience of the child, he seems to be living a dual life—one the free and healthful life of nature, the other the constrained and artificial life of the schoolroom. The teacher should understand the relation of the knowledge within the school to that without it, that he may close up this hiatus by linking the work of the one to the spontaneous and healthful acquisitions of the other. He should,

therefore, have a clear and complete idea of the relation of scientific knowledge as found in the text-books to the common knowledge of every-day life, that he may bring the out-door life and intellectual activities of the child into the schoolroom, and thus make study as natural and interesting as play.

2. *A teacher should understand something about the materials of knowledge.* What is knowledge? of what does it consist? which are its ideas, which its facts, which its truths, etc.? How many of our young teachers—and most of the educational work of the country is done by young teachers—can give an intelligent answer to these questions? How many understand the difference between an idea and a thought? And without such a distinction how can any teacher give a pupil a clear conception of the difference between a word and a sentence in grammar? How many can tell the difference between a particular idea, an abstract idea, and a general idea? And without understanding this difference, what does the distinction between proper, common, and abstract nouns amount to? Teachers speak of arithmetic training the judgment and the power of reasoning; but how many can tell what, in arithmetic, exercises the judgment, and what the reasoning power? Without a knowledge of the distinction between deductive and inductive truth, how can the teacher select such kind of truth as may be adapted to the educational capacities and wants of his pupils.

But, it may be asked, would you require common-school teachers to be philosophers? I answer, that if these distinctions, which lie at the foundation of their work, constitute philosophy, I would have them philosophers. Teaching is an art based upon the philosophy of the human mind, and teachers, therefore, should not be empirics. I would have the human soul receive that kind of knowledge which its capacities demand, and be educated in accordance with the laws which control its activities. Again it may be said, although this is all true in theory, and is generally admitted among educators, is it not placing the standard of qualification too high for the attainment of common-school teachers? I answer, not so. I can take a common-school teacher, with a fair knowledge of the common-school branches and a little knowledge of the elements of the natural sciences, and in a few weeks give him such an idea of the nature of the human mind and the nature of the knowledge by which it is educated, that his work may be done in the

light of simple, practical principles, of which before he had not the least conception.

Let it be understood that our common-school teachers are not to blame for this lack of qualification; we as teachers are to blame for not affording them the facilities for a fuller preparation. No class of workers are more anxious for improvement than the young men and women who are teaching in our common-schools. Show them that such a preparation would be useful to them, and give them the means of acquiring it, and they will not be long without it. If the time that is often wasted by "fancy work" at our teachers' institutes were spent in giving the teachers instruction upon the nature of the human mind and the general character of the knowledge by which it is developed, it would be both more satisfactory and more profitable to those who give their time and their money for the support of the institute. I feel that those of us who are directing the educational interests of the country, should be careful that we present the proper standard of qualification to young teachers, for they look to us for guidance.

3. *A teacher should understand the relation of the different branches of knowledge to each other.* In other words, he should understand the classification of knowledge. The sciences differ in their subject matter and in their methods of development. Some consist principally of facts and their classification. Some rise up, by the process of induction, into an investigation of the laws and causes of things. Others begin with intuitive ideas and truths, and, by the logic of deduction, pass on to the other truths which belong to them. These differences are so distinctly marked, that the different branches may be grouped together so that their general relations will be clearly exhibited.

To understand these relations will be of great advantage even to the teacher of a primary school. How can he give proper instruction in language, for instance, unless he knows that pronunciation, orthography, reading, grammar, rhetoric, etc., are all parts of the same general branch? When it has once dawned on the mind of a young teacher that these are all designed to teach a pupil the correct use of his mother-tongue, they will not be as so many disconnected studies in which he is to hear his pupils recite, but he will see how to unite them into a harmonious system working for a common end.

Such a qualification will give more unity and directness to

our school work. Much of the teaching in our public schools is disjointed and fragmentary. Branches are taught too much as individual things bearing no relation to other kindred branches, and parts of studies intimately related as if they were as separate as the antipodes. How small a number of teachers lead the pupil while studying arithmetic into the closely related ideas of algebra by generalizing an arithmetical process and introducing, occasionally, a general symbol. I fear that even to-day the majority of the teachers in our common schools teach multiplication without showing its relation to addition and teaching children to derive the products of the table by adding. A clearer conception of the relation of knowledge, it is evident, would often greatly increase the skill of an instructor. Much labor could often be saved by teaching pupils to see that the new process is but a different application of the old one. One of the most practical principles of education is the maxim of Aristotle—*from the known to the unknown;* and to apply this principle properly, it is necessary for the teacher to understand knowledge in its relations both general and special.

4. *A teacher should understand the relation of the different branches of science to the human mind.* All knowledge is the product of the human intellect, and as such it bears intimate relations to the mind. Some branches are produced principally by one faculty and some by another; and as these faculties differ in their operations, so do the branches differ in their character. These branches, as the product of mind, are used by the teacher to train mind, and, as thus employed, bring into activity the same faculties by which they were produced. Each branch of science, therefore, has an intimate educational relation to some one or more of the faculties of the mind to be educated. This educational relation it is of the utmost importance for the teacher to understand.

The teacher needs this qualification that he may adapt the branches to the culture of the various powers. Has he a lad whose perceptive powers are inactive—not a common thing among children, yet one which sometimes occurs—he should know what branches to give him to arouse them into activity. Has he a pupil who is deficient in reasoning power, he should understand the educational remedy, and give special prominence to the branches indicated. Has he a pupil with no imagination, a dull, matter-of-fact boy, who sees no beauty in a flower or a figure of speech, he ought to be able to select such a

course of study as would awaken an appreciation of the beautiful, and give culture to the imagination and the heart.

This point can not be too strongly urged. No intelligent teaching can be done without such a qualification. A knowledge of the general nature of the branches of study and their relation to the mind, is as necessary as a knowledge of mind itself. Possessing a knowledge of mind, the teacher may realize that the young pupil needs facts; but not knowing which are the fact sciences, he may set the child to committing the rules of arithmetic or the definitions of grammar. He may know that the reasoning powers of the child must be developed, and suppose that he has done all that is required when he has trained it to the logical forms of mathematics, not realizing that there are branches which contain other forms of reasoning which give quite as good if not better culture for the practical affairs of life. All good teaching must be done in the light both of a knowledge of mind and the relation of science to its capabilities and activities. Unless his work is illuminated by this light, the teacher will grope in darkness, and be but a stumbler and a blunderer. Teaching is a fine art,—not only the most important, but the most excellent of the arts,—and the teacher should be an artist in the highest and best meaning of the term.

I have in this article intimated what I mean by the teacher understanding the nature of knowledge. If the manner seems a little dogmatic, let the importance of the subject be my excuse. If I have urged that which educators regard as self-evident, the general ignorance of young teachers in this particular will be a sufficient justification. To have said any thing that shall induce teachers to prepare themselves more fully for their responsible work, is as high a satisfaction as we can wish.

State Normal School, Millersville, Pa. EDWARD BROOKS.

PLATO AND EDUCATION.

(*Concluded.*)

Music proper Plato would teach with reference to its effect on character, not as a mere polite accomplishment. The form and quality of music best adapted to educate are carefully considered. Words, melody, and rythm are discussed. The only in-

struments thought desirable are "the lyre and the harp for the city, and a pipe for the country." The wonderful influence of music in regulating the human mind and heart, is dwelt upon in eloquent strains:—

"Is not this the reason why musical training is so powerful, because rythm and harmony find their way into the secret places of the soul, on which they mightily fasten, bearing grace in their movements, and making the soul graceful of him who is rightly educated, or ungraceful if ill-educated; and also because he who has received this true education of the inner being, will most shrewdly perceive omissions or faults in art and nature, and with a true taste, while he praises and rejoices over, and receives into his soul the good, and becomes noble and good, he will justly blame and hate the bad, now in the days of his youth, even before he is able to know the reason of the thing; and when reason comes he will recognize and salute her as a friend with whom his education has made him long familiar."

Under gymnastics Plato considers the general care of the body, recommending temperance and moderation in exercise and diet. Seasonings in food, and all the "delicacies of Athenian confectionery" are to be avoided. Extreme simplicity in all things is enjoined. Simplicity in music "engenders temperance of soul"; in gymnastics, "bodily health." The rightly educated person should need neither magistrate nor physician. He should be a law to himself as to conduct and as to health. Soul culture should keep him from violating the laws of the state; gymnastics should keep him physically well. Respecting the relative importance of literature and gymnastics, Plato departed from the established opinion of the ancients. He was the first to declare the absolute superiority of the soul to the body. "The good body", he says, "does not improve the soul, but the good soul improves the body. Then if we have educated the mind, the minuter care of the body may properly be committed to the mind."

Plato regards studies and exercises as a means and not an end. Every faculty exists in embryo in the child; education calls it out. The fewer the methods of education the better, provided they answer the purpose of giving body and mind the use of themselves. Quintilian likens the mind to a vessel to be filled; Plato compares it to an eye turned toward the light, and thus made sensible of its power of seeing. Education is "not implanting eyes, for they exist already, but giving them a right direction, which they have not." How beautiful, how elevating this conception! The soul is designed to compass the uni-

verse in its bright vision. Education is the adjustment of the soul to the eternal verities. Pursuing his own studies upon this lofty plane, even in the glimmering light of ancient science, Plato reached the grand generalization that all knowledge is one,—a proposition which we are in the habit of regarding as of purely modern development.

The preliminary education we have described is interrupted when the pupils arrive at the age of sixteen, and they are subjected to a trial of practical life. When they reach the age of twenty, a selection of right natures is to be chosen, for a higher education. Sure, brave, fair, and noble persons, of keen and ready powers of acquisition and good memory, are to be selected. These only can become good guardians. They must be "unwearied, solid men, lovers of labor in any line." To these shall be imparted a knowledge of arithmetic, geometry, and astronomy. Plato attached great value to mathematics as developing the power of abstract thought. Dialectic was next to be studied. This is "the coping stone of the sciences; the nature of knowledge can go no further." The dialecterian is "one who has a conception of the essence of each thing", an abstract true idea of justice, truth, beauty, virtue, wisdom.

Again, education is to be interrupted, and its value tested, by application to practical duties. The educated man is not to rest satisfied with the contemplation of his own attainments; he must descend to the aid of his fellows. He should be not only a right thinker, but a perfect practical statesman. He must not spend all his time in the "heaven of ideas"; he must serve the state in the "den" of common life.

At the age of thirty, the best are once more to be selected from the best, and put to school once more. These choice natures are finally to become the highest rulers, the kings of the state. Only ripe philosophers can become kings. They are to devote themselves to study for five years. They are to review, classify, and sum up all the knowledge heretofore acquired. They are then to devote fifteen years to the highest concerns of the state,—to lead armies, to govern cities.

"And when they have reached fifty years of age, then let those who still survive and have distinguished themselves in every deed and in all knowledge come at last to their consummation: the time has now arrived at which they must raise the eye of the soul to the universal light which lightens all things, and behold the absolute good; for that is the pattern according to which they are to order the state and the lives of

individuals, and the remainder of their own lives also, making philosophy their chief pursuit; but, when their turn comes, also toiling at politics and ruling for the public good, not as if they were doing some great thing, but of necessity; and when they have brought up others like them, and left them in their place to be governors of the state, then will they depart to the Islands of the Blest, and dwell there; and the city will give them public memorials and sacrifices and honor them, if the Pythian oracle consent, as demigods, and at any rate, as blessed and divine."

Having led us to this mountain summit of human possibility, Plato points, with encouraging cheerfulness, to ultra-mundane heights, and fresh fields of endeavor beyond time. Not discouraged at the meager results which the culture of this life returns, he makes the best of mortality happy to even begin "something which avails against the day when (we) live again and hold discourse in another existence."

Plato's scheme of education, as a system, is totally inapplicable to our modern wants. Nevertheless, separated from the state, modified as to certain impractical features, and, so to speak, broadened at the base, so as to embrace the many as well as the few, it might serve us a very good purpose—at least as an ideal. Modern educational theories are better than ancient, chiefly because they are more humane and universal. They assume that all men are educable, even criminals, mad-men, and idiots. Modern society appreciates brass and iron, and modern education is the bold alchemy which transmutes base into noble, and noble to nobler still.

Plato's educational value to us is discovered not in his system, but in particular discussions and suggestions. He is rich in maxims. He is the father of object teaching, and kindergartens. In the character of Socrates, he paints a model teacher. His dialogues are acknowledged to be "the best examples of the nature and method of dialectic." I know of no other work so profitable for the seeker of general culture to peruse as Plato. Jowett's translation furnishes us with the entire work in clear and beautiful English. So sensible, so invigorating, so amusing are these splendid dialogues, that one involuntarily repeats Emerson's question, "Why not educate our young men on this book?"

Cincinnati, O. W. H. VENABLE.

A FEW WORDS NOT IN THE DICTIONARIES.

Notwithstanding the last editions of the great quarto dictionaries of Worcester and Webster are claimed to contain the definitions of 104,000 and 114,000 words respectively, yet they fail to include all the words of the English language. The adverb *normally*, now so frequently used, is found in neither of these works, although it has been inserted in the new edition of Johnson by Latham. Another word occasionally seen, namely, *circumnavigatory*, has not yet found a place in the dictionaries. The overlooking by the dictionary makers of words like *normally* and *circumnavigatory* is a venial offence, since their meanings are so apparent that few would ever look in a dictionary for them. The defects of dictionaries are felt most when unusual words are looked for. But it is impossible to remove these defects entirely, as scholars are constantly coining new words.

A noted English writer, Augustus de Morgan, in a notice of the Vestiges of Creation, uses the following sentence:

"I confess I never hear a man of note talk fluently about it without a curious glance at his proportions, to see whether there may be ground to conjecture that he may have more of 'mortal coil' than others in anaxyridical concealment."

As the English dictionaries have no such word as *anaxyridical*, how is the unclassical reader to get the full force of De Morgan's remark? The Greek scholar knows that *anaxyrides* is a word used by Herodotus and Xenophon for the *trousers* worn by eastern nations, which, according to Bähr, were not the *thulakoi*, or loose trousers, but a tighter kind like the Gallic *trews*. Sir Walter Scott uses the word *trews* in the sentence, "He wore trews, or close trousers, made of tartan." It is plain now that De Morgan meant by *anaxyridical, trouseral or pantaloonal.*

The following is another of De Morgan's sentences:

"Having thus disposed of Mr. James Smith, we proceed to a few remarks on the subject; it is one which a journal would never originate, but which is rendered necessary from time to time by the attempts of the autopseustic to become heteropseustic."

The great American dictionaries again fail the reader as to the meanings of *autopseustic* and *heteropseustic*. The Greek scholar is, however, able to decide that the *autopseustic* are those who deceive themselves, and the *heteropseustic* are those who deceive others.

"A man was summoned for a glutolactic assault; he complained of the publication of his proceeding. I kicked, etc., *in confidence*, he said."

This is another of De Morgan's sentences. What does *glutolactic* mean? It is not to be found in either Webster's or Worcester's Dictionary, nor am I able to tell what it means. I forbear to make the conjectures that might be based on several Latin words that might be considered as the components of the word, because none of these conjectures seem to suit the connection in which the word is used.

The following words used by De Morgan have not found a place in the dictionaries. The meaning of nearly all of them is apparent:—

Anonyme, antipodal, cyclometer, quadrator, notorified, surrounder, doctrinalist, impositioned, whizgig, paradoxer, onymatic, foolometers, rhythmopoëtic, deostracism.

A *quadrator* is one who claims to have found the square that is exactly equal in area to a given circle, and a *cyclometer* is one who claims to have found the exact length of the circumference of a circle, or the exact ratio of the circumference to the diameter.

Olphar Hamst, Esq., is the author of a book entitled "Handbook for Fictitious Names", published in London in 1568. He coins the following new words for the different modes of concealing or indicating authorship:

Initialism, titlonym, pseudo-titlonym, semi-initialism, phraseonym, ironym, geonym, phreonym, demonym, apocryph, prenonym, phreno-demonym, enigmatic-initialism, geo-demonym, phreno-geonym, pseudo-geonym, scenonym, polynym, crytograph, psendadry, aristonym, anastroph, translationym, allonym, telonism, pseudojyn, ananym, cryptonym, pharmaconym, alphabetism, pseudo-initialism, antonym.

It is a case of *pseudandry* when a woman adopts a man's name; for instance, Amantine Lucile Aurore Dupin, afterward Dudevant, signed herself George Sand, and a *pseudojyn* (better *pseudogyn*) when a man adopts a woman's name. It would be a case of *telonism* if I, William Downs Henkle, should sign myself M. S. E., these being the final letters of my three names.

I give below a few additional words not to be found in the last edition of Webster's. The authorities for the words are also given:

Abiogenesis Abiogenists, Huxley; *aboriginality*, Western Review; *abortionist*, New York Tribune; *adjoint*, Irving's Letters, vol. 1, p. 83; *aeroscope*, Meth. Q. Review, p. 536, 1868; *aërosiderites, aërosiderolites*, Lockyer; *ætiological*, Huxley; *affiate*, S. S. Haldeman; *affirmativeness*, De Morgan;

Agamogenetic, Huxley; *a-gley*, Burns; *althings*, Lond. Q. Review; *anallaxis, Anglish, Anglic*, Haldeman; *anterioric*, quoted by Western Review; *appredicate*, Sir W. Hamilton; *aquilarium*, Tribune; *Aristotelizing*, Hamilton; *arousably*, N. P. Willis; *artly*, Tribune; *asexualiy*, Huxley; *Astorian*, P. Irving; *autographically*, Felton; *automatically*, Huxley; *bathometer*, S. E. Morse in Tribune; *Bedouinism*, Cin. Gazette; *bilaterally*, Hamilton; *Biogenesis, Biogeny*, Huxley; *bondocracy*, Tribune; *bondless*, Emily Fister; *Brachyurous*, Huxley; *brumming*, Agassiz; *bummers*, Tribune; *bursal*, Hamilton; *cartful*, Kelly; *casualism*, Hamilton; *Catastrophism*, Huxley; *catheterism*, Bergeret; *cerebellic*, Hamilton; *ceryx*, Lon. Q. Review; *chiaroscurist*, Ruskin; *chordant*, W. H. Venable; *churchly*, Whedon in Meth. Q. Review; *coachee*, W. Irving; *co-arrangement*, Hamilton; *coccoliths, coccospheres*, Huxley; *cogitabundity*, Frend; *co-inhere*, Hamilton; *colloquiality*, Holloway; *colliquescence*, Hamilton; *commandite*, Western Review; *Comtism, Comtist, Comtian, Comtean*, Huxley; *concrescent*, Hamilton; *condensible*, West. Review; *confliction*, Hamilton; *confusive*, Hamilton; *conservatively*, Ohio Ed. Monthly; *consonanted*, Haldeman; *construable*, Hamilton; *continentally*, Alex. Hamilton; *convoluting*, West. Review; *co-operationists*, Thos. J. Butler; *coöriginal*, Hamilton; *corduroying*, Tribune; *correality*, Hamilton; *cosmophonography, cosmophonetic*, Haldeman; *costermongering*, Ruskin; *cotrustee*, Irving; *crackmen*, Tribune; *cubhood*, Huxley; *cyclesis*, Halderman; *cyclonist*, T. B. Moury; *cyprianism*, Tribune; *Darwinian, Darwinically, Darwinism*, Huxley; *degenerescenses*, Bergeret; *desecrative*, A. P. Calhoun; *diarrheal*, Tribune; *dilemmatic*, Hamilton; *dimorphic*, Wallace; *disponent*, Hamilton; *distributional*, Huxley; *divellent*, D. Kirkwood; *diverticulum*, Darwin; *eductively*, Haldeman; *edueative*, North Amer. Review; *encentric*, Hamilton; *enorganic*, Hamilton; *Fprrotic*, Müller; *epithalial*, Acton; *ethnographically*, Hamilton; *etymologic*, Haldeman; *evitability*, Hamilton; *evolvers*, Hamilton; *evolutionism*, Huxley; *exceptionality*, Tribune; *far-farer*, Lon. Q. Review; *Fourierist*, West. Review; *frauding*, Bergeret; *Frumentarian*, Blackwood; *functionality*, Earle; *gackel, gackting*, Agassiz; *genesiac*, Bergeret; *Germanist*, North Amer. Review; *ghostified*, An. Sci. Dis.; *glabellar*, Hamilton; *glottosis*, Haldeman; *glottic*, North Amer. Review; *hamza*, Haldeman; *heteronymic, heteronymy, heteronymically, heterotypist*, Haldeman; *heteronymous, heteronymously*, Le Conte; *hexadactyle*, Huxley; *historiador*, Irving; *homotaxis*, Huxley; *honorability*, quoted by M. D. Conway; *hymnists*, Kelley; *illogicality*, Huxley; *labiality*, Haldeman.

I shall not continue this list further. I have gone only half through the alphabet, and have omitted in the first half many words that I have noted in my reading. The above will be sufficient to show the reader that the fullest dictionary falls short in its vocabulary of the whole number of words in present use.

Salem, Ohio. W. D. HENKLE.

CRAMMING FOR EXAMINATIONS.

MR. EDITOR: Your remarks on this subject in the June number of the MONTHLY, induce me to send you my plan of avoiding the evils referred to.

The first classes I prepared for public examination, were worked up to a very high pitch of excitement, and seeing that this was wrong, I set myself to work to solve the problem of good examinations, without the usual nervous prostration. I took time to review well the lesssons taught, and the day before the examination I reviewed all the ground gone over. When my pupils were dismissed in the evening, I requested them to leave all their books in the schoolroom, and, if possible, not to *think* of their studies until they returned the next morning. "Run", I said, "play, work about the house or in the garden—take entire relief from thought and worry. Do not let me see an anxious face in the morning."

The pupils came to school the next morning fresh and bright, and they passed through the examination not only well, but without much fatigue—a result due to entire absence of care and study the night before.

The next year I taught a school of a higher grade, and the examinations for the annual transfer came on Monday. The Thursday previous, I requested the class to take home their books, and look up all doubtful points, and to tell their parents that they would not be home to dinner the next day. Friday morning school was called at half past eight, and, taking up study after study, we went over the entire ground from the beginning, reviewing not only our book knowledge, but adding that gained by observation. We worked faithfully for five hours and a half, when I said, "Not a book is to go home tonight. You all need rest from study. Let us take a real vacation till Monday morning. If you can go on any visit or excursion, I advise you to do so. I am going to spend Saturday in the country, at John's home.

When Monday morning came I was greeted with bright, fresh, and happy faces. "Well", I said, "what do you think I have been doing, since Friday?" I looked at John. His face broadened with a smile, as he remembered our excursion on Saturday; of our digging for fish worms, soiling our hands with mother earth; of our going to the creek to fish and our poor success, because, as John said, I talked too much, thereby re-

turning the reproof which I had many times given him; of our search for mosses, shells, stones, and other "*rubbish*", as a friend called my treasures.

I gave the class a brief and lively description of my visit, and then the visitors and examiners having come, classes were called. The questions asked were answered clearly and readily; happiness reigned, and chiefly because we did not come before the august examiners, tired, nervous, exhausted in mind and body. As a result the entire class was transferred.

If the reader can not see the moral of my experiment, I am afraid, as Dickens said, that it is not worth one.

R. C. W.

PRIMARY READING.*

There are three methods, quite commonly presented as distinct each from the other, of accomplishing the first step in teaching reading, to wit, *the teaching of children to call words at sight*, but, if carefully studied, they are seen to resolve themselves into one.

The first is the A–B–C method, by which most of us were taught to read. We all know how it proceeds. Possibly some of us have not philosophized much upon how we were taught by it. We learned that *m-a-n* spelled *man*, that *r-a-n* spelled *ran*, etc., and very soon came to decide for ourselves that *c-a-n* spells *can*, and *v-a-n*, *van*. How did this come about? Simply thus: By the repeated spelling and pronunciation, in immediate succession, of these words, we came to associate each letter with its appropriate sound, so that the former suggested the latter at once. So we learned to read *phonically*, and that "without a master." We were left to do, unaided, the most difficult part of our task. Many of us, however, had great advantage over children now doing this work, because we learned from columns of similar words in the spelling book, which greatly diminished our difficulties. Had we been thrust into miscellaneous reading at once, our way would have been a dubious one, I am sure.

The second is the Word Method. This can hardly be dignified by the name of a method, as it can be made, at the most, but an introduction to reading. No child is supposed, even by the most ardent advocates of this method, long to require to be

*Condensed from a paper in the *Indiana School Journal* for January, by Miss D. A. Lathrop, of Cincinnati.

told every new word, and to know it only as a whole. He is expected soon to be able to determine words for himself, either by spelling by letter, and so getting the powers of the letters indirectly, or by the practice of phonic spelling.

The third is the Phonic Method. By this method the teacher instructs her pupils, from the beginning, to read letters, syllables, and words—that is, letters alone and in connection—losing sight of everything, in determining the word, but the powers of the letters.

The irregularities of the English language make the difficulties of teaching it phonically neither few nor small. Let us look over these difficulties together, and see if we can not discover an end by which we can ravel this tangled web. We wish to subdivide difficulties so as to present them gradually. We must be methodical that we may be thorough. Where shall we begin to teach the powers of the letters? With vowels or with consonants? The vowels are the *souls* of language; the consonants but the body. As the vowels are the characteristic parts of words, let us begin with them. But vowels have long, short, and occasional sounds. With which shall we begin? The choice is evidently between the long and short sounds. The long sounds may be something more easily made —it is so claimed—but they are found, almost without exception, in connection with silent letters. That is the ordinary way of indicating these sounds as *cede*, *seed*, *lead*, etc. So the words containing them are ordinarily more complex than those containing the short vowels; and they are words less frequently used by children. So let us try the short vowels first.

We will teach, first, words having one initial and one terminal consonant. It is easy to run through the alphabet and make a list of all the words in short *a* of this kind, and from this list to select enough of the most familiar to get all the consonant sounds. Teach these, forming words into sentences and sentences into paragraphs, as soon as possible. Then let *ĕ*, *ĭ*, *ŏ*, *ŭ* follow in the same manner. Next take long *a* and silent terminal *e*, as in *babe*, *face*, *lace*, *race*, etc., to be followed by *ē*, *ī*, *ō*, *ū*. It is not a difficult matter to invent stories as we proceed, using only the words with which the children are already familiar, adding a few words as wholes, as *I*, *a*, *the*, *and*, *is*, as needed. Then we may teach the two sounds of *s* and *g*, the occasional sounds of the vowels, double consonants, silent letters, etc. Thus our reading will go forward methodically and thoroughly.

EDITORIAL DEPARTMENT.

—— Prof. Young's second paper on the subjects and plan of instruction in the schools of Baden, continued from the May number, will appear next month. It reached us a little too late for this number.—— Those of our readers who went to school to Plato last month, will be glad to take a second lesson this month. These ancient teachers are, at least, able to take some of the conceit out of us. Some of our educational methods and ideas are not quite as original and modern as many suppose.

—— The excellent paper in this number on the Kindergarten first appeared in one of the Boston daily papers, and was subsequently published in pamphlet form with a prefatory note by "G. B. E.", the well known initials of one of the most eminent educationists in the country. The paper presents very clearly the more important peculiarities of the Kindergarten, though these, in several instances, are contrasted with the characteristic features of the primary school of twenty to thirty years ago. The best primary schools of the present day do not repress all activity in young children in school hours, and the course of instruction embodies, more or less faithfullv, the objective and inductive methods, with much of the spirit of Froebel's system. It ought not to be necessary to say that no American state, outside of New England, admits children to the public schools under five years of age, and, with possibly one or two exceptions, no state admits pupils under *six* years of age. In most of the states children spend two of the three years of the Kindergarten period in the nursery. These errors in the paper are excusable, perhaps, since too many primary schools of the kind described can still be found. It is stated in the portion of the paragraph omitted that the Kindergarten is making encouraging progress in Europe. Austria has just made it a part of her school system; Hungary has sent a number of young ladies to Germany to perfect themselves in it; and Kindergartens are found in many of the cities of Germany, Switzerland, and France.

—— Supt. Wickersham, of Pennsylvania, has requested several of his institute assistants to give him their views on the management of teachers' institutes. The responses of Messrs. W. W. Woodruff and A. N. Raub, two of the most experienced and successful institute instructors in the state, appear in the June number of the *School Journal*, and we are gratified to find that they sustain the views expressed in our May editorial. Mr. Woodruff maintains that "the principal work of the teachers' institute should be to give instruction in the science and art of teaching", but that the evenings may properly furnish "general instruction and rational enjoyment." He thinks that the instructors should be

selected "with reference to practical results", and that, while a portion of the work should be done by the teachers of the county, the desire of earnest teachers "to hear the views and learn the methods of those who have had a wider observation and a more varied experience", should be gratified. He wisely urges that county superintendents should examine teachers on the more important instruction of the institute, and that it should be insisted upon that an earnest effort be made to apply the same in the schoolroom. He gives several practical suggestions on punctuality, the topics on which instruction should be given, etc.

—— Mr. Raub condemns the attempt to make institutes "entertaining rather than instructive", and he criticises sharply and justly the folly of making instruction in reading an elocutionary display for the "entertaining" of the audience. He thinks that the day sessions of an institute should be devoted to practical, professional instruction, and that the entertainment and purely literary exercises should occur in the evenings. He objects to "irrelevant" and "aimless" essays, and adds that he has known "half the time of an institute to be consumed in a profitless discussion which should have been consigned to the local lyceum." He states that, while he has heard the policy of employing "instructors from abroad" soundly criticised by an "ambitious speaker", it is not the body of an institute generally which is opposed to aid from abroad." He thinks that the evil done by the practice of appointing "critics" outweighs the good. His objections to the "query-box" seem to be based on its improper use, and we may add that we have never seen the "query-box" skillfully used in a Pennsylvania institute. Mr. Raub's paper is full of just criticism and practical suggestion.

—— Mr. Lind informs us that we misunderstood his remarks on the management of teachers' institutes. He states that, while he condemned lectures, he did not commend the "drawing out" or question plan, as we inferred. He simply proposed that teachers have the opportunity, in turn, to discuss subjects—to rise and express their views. If we now understand our contributor, he would have the exercises of an institute consist (1) of discussions participated in by the members in turn, and (2) of class exercises, in which each teacher, in turn, has the privilege "of teaching the rest, they acting as 'children' with the privilege of criticising." We inferred from Mr. Lind's objection to the "pouring-in process", that he would not have it used even in the discussions, inasmuch as it can make little difference whether the "pouring in" is done by two or twenty persons. We cheerfully make the correction, though we can not see that it improves his plan. We have never seen an institute conducted in the manner proposed, and, in view of our limited observation and experience in institutes, it is possible that we ought not to question its feasibility. But the institute discussions which we have heard, have been, as a rule, so nearly profitless that we can but doubt the propriety of turning our institutes into debating societies, in which

the teachers, "in turn", shall express their views! But our contributor is willing to put his plan to the comparative test proposed by us last month, and he hopes that we may have the opportunity of seeing "the proper kind of teaching in institutes." We shall certainly improve this opportunity when it occurs, and, to this end, we hope that our young friend may soon have the direction of an institute.

—— *The Chicago Teacher* for June speaks out with no uncertain sound on the Bible question, "to lend new light to the discussion." Here is some of the new light: "As a moral and religious force, the Bible in the public schools is a chip in porridge." "Our thought then was, that the Holy Scriptures were made too common by being used in the public schools, and fifteen years' public school experience has not altered the opinion." "Much of the flippancy and irreverence of American society —irreverence that is simply appalling to one of European education—is owing to the way in which the Bible is bandied about in the public schools." Is this new light true or false? If it emanates from the editor's actual observations, there must be something peculiar either in his experience or ours. We have visited many schools, and, with few exceptions, we have never heard the Bible read in a careless or irreverent manner. If the Bible is "bandied about" in any school. the fact is, to say the least, not very creditable to the teacher. If, "when spit-balls and beans give out", the pupils in the Chicago schools amuse themselves by hurling Bibles at each other's heads, we would advise Bro. Pickard to try the suspension feature of his "moral suasion" experiment on some of his teachers! But it is easy to attribute a result to a wrong cause. May not the admired reverence "of one of European education", be due to the fact that formal, sectarian religious instruction is an important part of school training in every country of Europe? Would this fact, if it be one, be an argument for or against the making of the American school system "thoroughly secular"? We have little respect for that appalling reverence for the Bible which keeps one from reading it.

—— The "Free High School Act" of Maine is one of the most important school laws enacted the present year. It authorizes each town (township) in the state to establish and support a high school, and it pledges the state to pay one-half of the annual expense,—with the condition that no town shall receive from the State more than five hundred dollars in any one year. Adjoining towns may unite together and establish a union high school, and when a town refuses to avail itself of the benefit of the act, one or more school districts may do so. The *Journal of Education* reports that towns in all parts of the state have already taken action under the law, and it is anticipated that a large number of high schools will be established. We have long believed that the only feasible mode of sustaining high schools in country districts is for the state to bear all or a considerable share of the expense. Some pecuniary

encouragement is needed to induce the people of a town to tax themselves to support a high school which benefits those most who reside near it. The provision of the Ohio law authorizing the organization of township high schools is practically a dead letter, though there is most urgent need of such schools. The public school system has largely supplanted the old academies, but their place has not been supplied except in the cities and large villages, where free high schools are sustained. The great defect of our present school system is its failure to supply country youth with facilities for acquiring more than an elementary education. The sending of a pupil from the country to a city or village high school is too expensive for farmers, and besides the school does not afford the advantages demanded. The common schools of the country should be supplemented by a system of free academies or high schools. Maine has adopted a feasible system.

—— We are pleased to notice that the advocates of laws compelling school attendance begin to see that their case is not made out when they have shown the necessity of universal education and the right of the state to provide for and secure it. The important point, as Thos. K. Beecher puts it, is to find the power in American institutions, that can be relied on to do the compelling, the driving. "Drive on! all cry; but where is the driver?" In a monarchical government, like Germany, the driver is in his place irrespective of the votes or wishes of the driven, and it is his business to drive. It may be true that a compulsory system can be enforced in this country, but the fact is yet to be established. Past experience is not very encouraging. In response to an inquiry of Supt. Wickersham, of Pennsylvania, the *Michigan Teacher* says:

"To his question above we reply without hesitation, that our Compulsory Attendance Act, as a penal enactment, is practically inoperative in nearly all parts of the state. A school board here and there has announced its intention to enforce the law in its locality; but, so far as we have been able to ascertain results, the proclamation in each case has been a mere *brutum fulmen*. In only one community—a backwoods district in southwestern Michigan—have we heard of the imposition of a fine for neglect to educate children for the prescribed time per year. This after twenty months' trial of the law. But we do not altogether despair of its success. Its moral effect is reported to be good in many places, in increasing attendance upon the public schools through fear of punishment, or because public attention has been more pointedly directed toward education by the Compulsory Act. And we are free to say that this effect seems just now to be the best hope of the new departure in Michigan."

—— The corner stone of Sage College for women, to be conducted in connection with Cornell University, was laid on the 15th of May. Addresses were delivered by Chancellor Winchell, of Syracuse University, President Angell, of Michigan University, Moses Coit Tyler, Goldwin Smith, Henry W. Sage, and others. President Angell stated that co-education in Michigan University was still an experiment, having been tried only three years and under exceptionably favorable circumstances. Thus far the union of the two sexes in the same lecture halls and classrooms had worked satisfactorily. The women retained all their womanliness unimpaired, and ranked with the men in progress and efficiency. He thought that one strong practical argument for co-education was the

fact that few states can afford to provide separate universities for the sexes. A great university is a costly institution, and, if the best facilities for a higher education are to be provided for women, it must be largely done through mixed colleges.

—— The late meeting of the American Social Science Association in Boston was the occasion of an able discussion on the co-education of the sexes. The subject was introduced in a paper read by Colonel Higginson who earnestly advocated the admission of women to Harvard College on the same conditions as men. President Eliot stated that after visiting some thirty western colleges that admit women, he had come to a conclusion directly opposed to the view of Colonel Higginson. Oberlin College began with the same course for men and women, but was obliged to adopt separate courses, with separate degrees. Very few of the young ladies take the regular college course. He believed that the minds of men and women were as different as were their bodies, and both male and female physicians are agreed that girls can not bear the nervous strain of hard study as well as boys. With his present convictions he should be unwilling to open the doors of Harvard to women. President Eliot's views were warmly opposed by Wendell Phillips, President Raymond, of Vassar, Mrs. Howe, Mrs. Cheeney, and Mrs. Livermore. Professor Agassiz dissented from Col. Higginson's argument of analogy that because the sexes require the same food, they demand the same education. He said it was not true that the sexes require precisely the same food. The discussion has been taken up by the papers, and co-education is at present a "live" topic.

—— There seems to be a very general impression that the Agricultural Colleges, founded by the Congressional Land Grant, are not a success. Their courses are too limited to meet the requirements of liberal culture, and too general and extensive to furnish a special preparation for the farm. Though the Massachusetts Agricultural College claims to be preëminently an institution "for training farmers", no considerable number of its students intend to earn a living by farming. It is believed that most of the students in these institutions attend them for precisely the same purpose that they would attend any other school, and that the education furnished is in no practical sense a special training for the farm. The real value of these colleges must, therefore, depend largely on the number of their students who would not receive a higher education in other institutions. If they not only duplicate the work of other institutions, but very largely draw their students from them, their utility is questionable. There is a demand for thorough scientific schools, and if our agricultural colleges can use their endowments to meet this demand, they will fill an important place in our educational system. We hope to see the Ohio Agricultural College become as thorough a scientific institution as the Sheffield Scientific School in New Haven. It opens late enough to profit by the mistakes of other institutions of its class.

METHODS OF CONDUCTING RECITATIONS.

We have long been satisfied that the success of teachers, as a class, would be much increased by a careful study of the subject of class management. There are many teachers who can give no good or satisfactory reason for using one method of conducting recitations rather than another. The truth of this remark has been fully attested whenever teachers have been called upon by examiners to state in writing the comparative merits of different methods. "These things being so", it occurs to us that a systematic presentation of the principal advantages and disadvantages of the consecutive and promiscuous methods of calling on pupils to recite, may be of assistance to some of our readers.

I. The Consecutive Method.

The first advantage of the consecutive or "turn" method is its *rapidity.* As the pupils recite in turn, no time is lost in designating the pupil who is to recite, and as each pupil knows just when he is to be called on, he is prepared to recite promptly. It is true that when the promiscuous method is skillfully used, each pupil is obliged to be ready to respond, but the possibility that he may not be called on, causes, as a rule, some hesitation. In the turn method the pupil's reciting is a *certainty*, and hence he is not only upon the alert, but is ready to proceed. Experiment shows conclusively that more questions can be asked and answered in a given time when the consecutive method is used than when pupils are called on promiscuously.

The consecutive method is *easy for the teacher.* It relieves him from the necessity of selecting and designating the pupils to recite, and hence his labor (not including the imparting of instruction) is reduced to asking questions or assigning topics and the determining of the correctness of the reciting of the pupils. The recitation proceeds as mechanically as clock-work.

A third advantage of the consecutive method is the fact that *all the pupils have an opportunity of reciting.* No pupil is omitted. If the class is too large to permit all to recite at any recitation, the next day takes up the work at the proper pupil, and thus all are called on in due time, and all have an equal opportunity of reciting. This last remark may not be true, if the members of the class do not take their places from day to day in a fixed or regular order. The importance of this advantage will be considered in connection with the promiscuous method.

The chief disadvantage of the consecutive method is *its failure to necessitate close and universal attention.* The pupil reciting and the one who has the next "turn", must give attention, but the others are not obliged to do so. When the pupils near the head of the class are reciting, those near the foot may be thinking of the next holiday. As soon as a pupil has recited, he can go a fishing mentally until his "turn" comes again. A skillful teacher may, of course, so interest his class in the lesson as to secure close and undivided attention, but this is not a result of the consecutive method. The attention is secured not in consequence of but in spite of it.

A second disadvantage of the turn method is the fact that *it permits a partial preparation of the lesson.* The pupil near the foot of the class is tempted to neglect the part of the lesson which will be recited by the pupils near the head, and *vice versa.* When the old plan of having pupils read one "verse" each prevailed, many pupils counted the verses, and studied only the one which they would read. As a general rule, pupils will study most faithfully that portion of the lesson which they expect to recite, and the turn method permits this expectation. This defect may be obviated by assigning questions and topics in a different order from that in the text-book, and much more easily by having the recitation *begin* from day to day at different places in the class. If the third pupil *begins* the recitation one day, the tenth the next day, the sixth the next day, and so on, no pupil, when preparing the lesson, can even guess what portion of it will fall to him to recite, and hence he is only safe when he has prepared the whole lesson. Many teachers who use the consecutive method, have never thought of this simple means of correcting the obvious and often serious defect above referred to.

Another disadvantage of the consecutive method is the fact that *it prevents the most thorough testing of the pupil's preparation.* The portion of the lesson which falls to a pupil by turn, may be the very portion which will be least profitable for him to recite. He may be able to recite this well, and yet the teacher may know that he has not faithfully studied or does not clearly understand another portion. The revolving recitation may bring to the idle pupil the only question or topic in the lesson which he can recite, and he may thus be tempted to trust to good (?) luck next time. The highest efficiency of a recitation requires that its tests be skillfully and wisely distributed.

II. The Promiscuous Method.

The promiscuous method of calling on pupils to recite *secures and holds the attention of all the the pupils in the class.* This result depends somewhat on the skill of the teacher, but the method both permits and favors the highest success. When a topic or question is announced, every pupil is obliged to be on the alert, as he may be designated to recite. He must also give attention to the pupil reciting, as, at any moment, he may be called upon to correct errors, supply omissions, or complete the recitation. The degree of attention given to pupils reciting may be greatly increased by the teacher's frequently calling on a pupil to complete the recitation of another, taking it up precisely at the right point. This may be done with great success in recitations in arithmetic, particularly in the oral solutions of mental problems, also in history, reading, and indeed in nearly all the branches. This advantage of the promiscuous method is wholly lost when the pupil to recite is designated *before* the topic is assigned. The reason is obvious. The teacher should not even glance at the pupil to be called upon before assigning the topic.

A second advantage of this method is the fact that *it necessitates the preparation of the entire lesson.* No pupil knows what part of the lesson will fall to him; nor can he tell even after the recitation is begun. He is lia-

ble to be called upon to recite any part of the lesson, and his only safety is to make full preparation.

The promiscuous method also permits *a proper distribution of the recitation.* The tests can be thrown by the teacher just where they will prove most effective and do the most good. The idle pupil may be given full opportunity to show the results of idleness; the pupil who was assisted yesterday, may be called upon to recite in review; any want of attention may instantly be corrected, etc., etc. The recitation may be made a thorough test.

As a result of the foregoing advantages, the promiscuous method makes the recitation *a fine mental drill*—an excellent mental gymnastic. The difference between it and the consecutive method may be easily shown. Suppose a class in arithmetic, containing twenty pupils, solves twenty mental problems in a recitation. By the consecutive method, as generally used, each pupil solves one problem and he *is obliged* to solve but one. Hence the recitation necessitates but *twenty* mental solutions. By the promiscuous method each pupil is obliged to solve mentally each of the twenty problems, and hence the recitation necessitates *four hundred* mental solutions.

The principal disadvantages of the promiscuous method are as follows:

1. *It is less rapid* than the consecutive method, time being necessarily consumed in designating the pupil to recite.

2. *It is not so easy for the teacher*, as the consecutive method. The increased attention and interest secured by it may, however, be more than an offset to the extra labor involved in selecting the pupils to recite.

3. It does not give the pupils *an equal opportunity of reciting.* This defect is most serious in large classes, the teacher being liable to omit some of the pupils. We have known classes in which it often happened that certain pupils did not have an opportunity to recite for several successive recitations. This almost invariably results in a loss of interest on the part of the omitted pupils, and a neglect of study. Few pupils will thoroughly prepare lessons, if there is even a strong probability that they will not be called on to recite. Faithful study is most certainly secured when every recitation tests the preparation of each pupil in the class. Pupils are sometimes omitted purposely, this being most likely to occur in certain schools *when visitors are present*, as in public examinations. The temptation to call on the brightest and best pupils on such occasions, is too strong for many weak teachers to resist.

4. It permits *an improper distribution of the recitation.* This disadvantage is similar to the third, but it merits separate consideration. Easy and superficial teachers are apt not only to assign the greater portion of the recitation to the brighter pupils, but to *assort* their pupils according to the nature of the topics or questions. The difficult questions are assigned, it may be unconsciously, to the best pupils, and the easy tests are given to the dull and backward. A "severely thorough" teacher, on the contrary, is liable to fall into the habit of overwhelming the backward or mentally feeble pupils with all the difficulties of each lesson and most of the reciting.

Various devices have been resorted to by teachers to obviate the last two defects of the promiscuous method. One of these is to put the name or number of each member of the class on a small card. The cards are mixed thoroughly at each recitation, and the pupil to recite is selected by the card drawn or picked up by the teacher. This plan works very well in advanced classes with long recitations, and, especially, if the teacher *frequently* takes a card from those already drawn, thus holding the attention of those who have recited.

Another device is to put all the numbers of the members of the class on one card, arranging the same in the form of some geometrical figure which will permit the calling of the numbers on successive days in different orders. We have used this plan, which, we believe, we devised, with great satisfaction. It leaves the teacher free to sit or stand during the recitation, to move about the room and occupy different positions. When the recitation closes, the teacher knows what pupils, if any, have been omitted, and by frequently calling on pupils without reference to the card, the attention of the entire class is held.

But the easiest plan of avoiding the defects of the consecutive and promiscuous methods is *to combine them, by permitting pupils to recite by turn* EXCEPT *when the teacher designates another pupil.* If these exceptions are sufficiently numerous, the attention of the class will be as universally held as by the promiscuous method. The most skillful teacher of oral spelling we have ever known, combined these methods. The words passed rapidly down her class except when she "threw" them to other pupils, which was done so frequently and skillfully that no pupil felt safe in taking his eye from her. When the recitation closed, every pupil had been tested, and the poor spellers and the listless, idle, and careless had received special attention. A little practice will enable any skillful teacher to combine these methods successfully.

NATIONAL EDUCATIONAL ASSCCIATION.

The programme of exercises for the annual meeting, to be held in Elmira, N. Y., August 5th, 6th, and 7th 1873, is as follows:

General Association: B. G. Northrop, New Haven, President.

1. "Ought the Chinese and Japanese Indemnities to be refunded unconditionally, or devoted to specific educational purposes?" In the discussion of the question, Mr. Chin Laisun, of Shanghai, will speak of the New Educational Movements of China, and Prof. E. H. House, of the Imperial College of Tokei (Yedo), on "The New Educational Plans of Japan." 2. "Upper Schools", by Dr. James McCosh, President of the College of New Jersey. Discussion opened by Samuel Fallows, Superintendent of the Schools of Wisconsin. 3. "How much culture shall be imparted in our free schools?" by Richard Edwards, President of the Normal University of Illinois. Discussion opened by J. P. Wickersham, Superintendent of Schools of Pennsylvania. 4. "Should American Youth be Educated Abroad?" by M. H. Buckham, President of the Uni-

versity of Vermont. Discussion opened by H. B. Wilson, Supt. of Schools of Minnesota. 5. "Education in the Southern States", by Hon. J. C. Gibbs, State Superintendent of Schools, Florida. Discussion opened by E. H. Fairchild, President of Berea College, Kentucky. 6. "Co-education of the Sexes", by President White, of Cornell University. 7. "The Relation of the General Government to Education", by Prof. G. W. Atherton, of Rutger College, N. J. Discussion opened by John Hancock, Supt. of Schools, Cincinnati. 8. "Educational Features of the Vienna Exposition", by Prof. J. W. Hoyt, of Wisconsin.

Normal Department: A. G. Boyden, Bridgewater, Mass., President.

1. "The Duties and Dangers of Normal Schools", by Richard Edwards, President of State Normal University, Illinois. 2. "Elementary and Scientific Knowledge", by John W. Dickinson, Principal State Normal School, Westfield, Mass. 3. "Training Schools—Their place in Normal School Work", by Miss Delia A. Lathrop, Principal Training School, Cincinnati. 4. A Paper on "The relative contribution of scholarship and methods to the power of the teacher", by Henry B. Buckham, Principal State Normal School, Buffalo, N. Y.

The following questions are also presented for discussion: 1. "To what extent and in what ways ought a Normal School to conform its plans to the wants of the region in which it is located?" 2. "What should the Normal School aim to accomplish in the teaching of Natural Science?"

Department of Higher Instruction: J. D. Runkle, Boston, President.

1. "National University", by Charles W. Eliot, President of Harvard University. 2. "Study of the Classics", by Prof. Edward S. Joynes, of the Washington and Lee University, Virginia. 3. "A Liberal Education for the Nineteenth Century", by Prof. W. P. Atkinson, of the Institute of Technology, Boston.

Department of Elementary Schools: N. A. Calkins, New York, President.

Two Papers on "Elementary Reading." 1. "Thought and Sentence Method", by G. L. Farnham, Superintendent Public Schools, Binghamton, New York. 2. "Phonetic Method with Pronouncing Orthography, in its relations to other Methods", by Dr. Edwin Leigh. Discussion of the subject to follow the last paper. 3. "Arithmetic—Principles and Methods of Illustration", by M. McVicar, Principal of the State Normal Training School, Potsdam, N. Y. 4. "How may Elementary School Instruction be made most useful to the future citizen?" by H. F. Harrington, Superintendent of Schools, New Bedford, Mass. 5. "What number of school hours, daily, is most profitable for children under ten years of age?" by Andrew J. Rickoff, Superintendent of Schools, Cleveland, Ohio. 6. Question for discussion: "How may pupils in Elementary Schools be trained to speak and write our language correctly?"

The programme for the Department of Superintendence, W. T. Harris, St. Louis, President, is not announced.

No additional railroad arrangements are announced. The free return promised by the New York & Erie extends only to the termini of the road, viz., Salamanca, Dunkirk, Niagara Falls, etc. The hotels reduce their rates to $3.00, $2.50, and $2.00 per day.

EDUCATIONAL INTELLIGENCE.

—— When notified that a subscriber has failed to receive any number of the Teacher due him, we always remail it.

—— There is much opposition to the use of slates in the schools of Germany. The grating of numerous pencils is believed to be injurious to the nerves of many children.

—— The city of Madison, Wis., has reduced the number of school hours per day from six to five. The schools of Columbus, Ohio, are in session but five hours daily. There is a movement in Massachusetts favoring the adoption of one daily session of four hours.

—— The Ohio Association of School Superintendents will meet at Put-in Bay on Tuesday, July 1st, and the joint meeting of the Teachers' Associations of Ohio and Michigan will be held at the same place, July 2d and 3d.

—— The new school law of Ohio provides that no text-book shall be changed within three years after its adoption without the consent of three-fourths of the members of the board of education, given at a regular meeting. This is a wise provision.

—— The faculty, graduates, and students of the State Normal School of Michigan propose to make a trip of two weeks to Lake Superior, touching at all the points of interest. They cordially invite the teachers of Michigan and their friends to join them in the excursion.

—— The eighth term of the normal schools under the auspices of the Society of Friends in North Carolina, opened in Summerfield on the 16th of June, and will continue one month. The school is under the supervision of A. J. Tomlinson, of Bush Hill, an experienced instructor of teachers.

—— The Fifth Annual Meeting of the American Philological Association will be held at Easton, Pa., the seat of Lafayette College, commencing on Tuesday, July 22d, at three o'clock in the afternoon. Persons wishing further information with reference to the meeting, may address the Secretary of the Association, Prof. G. F. Comfort, Syracuse, N. Y., or the Secretary of the Local Committee, Prof. R. B. Youngman, Easton, Pa.

—— The next annual meeting of the State Teachers' Association of West Virginia will be held in Martinsburg, July 8th, 9th, and 10th, 1873; the Virginia Teachers' Association will meet in Alexandria, July 8th to 12th; the Wisconsin Teachers' Association, in Sparta, July 8th, 9th, and 10th; the Pennsylvania Teachers' Association, in Pittsburg, August 12th and 13th; and the Maryland Teachers' Association, in Hagerstown, August 27th, 28th, and 29th.

—— The last quarterly report of the Boston schools states that the four Japanese boys who entered the Rice School at the beginning of the year, had been in this country but six months and were understood with

great difficulty. They now speak and read quite plainly, and they write in better English than a majority of the boys in the first class. They entered the fifth class, and one of them is now at the *head* of the second. This is remarkable progress.

—— SUPT. WICKERSHAM, of Pennsylvania, has just closed a series of private conferences with the county superintendents in the various sections of the state. The general questions considered included the educational wants of the people and the work of the superintendency and its difficulties. A conference with city and borough superintendents was held in Harrisburg, May 20th. He reports that no such fruitful meetings have ever been held in Pennsylvania.

—— A CORRESPONDENT of the *Chicago Tribune* states that a leading manufacturer of school furniture recently "circularized" several states, offering directors and other school officers liberal commissions on his furniture introduced by them into the schools. School furniture thus advertised has a poor chance of going into schools in charge of honest men, and open bribery is not likely to prove good policy, even when school officers are dishonest, unless they are also fools.

—— THE proprietors and editors of the *New York Times* propose to repeat their children's excursions of last year, which gave so many of the poor children of the city an opportunity to see the green fields, breathe the fresh air, and feel the joy of gratitude for human kindness and sympathy. Each excursion will be under the personal supervision of one or more of the editors of the *Times*, and the enterprise is begun with a reserve fund of $3,400. The first excursion of this season took place on the third Saturday of June.

—— HON. R. B. ROOSEVELT donated to the board of education of New York $4,700, the extra salary drawn by him as a member of the last Congress, with the condition that the money should be invested and the interest used as prizes for meritorious pupils. He stated that he was opposed to the retroactive feature of the salary act, but thinks that the money now belongs to his district, and not to the United States. The board declined to accept the money, "on account of its origin as defined by the donor, believing that by this concurrent testimony they and he will best promote those high ends in the education of the young which are of paramount importance, above all prizes of silver and gold."

—— EDWARD ORTON, president of Antioch College since January last formerly principal of the Preparatory Department, and for three years past one of the State Geologists of Ohio, has accepted the presidency of the Ohio Agricultural and Mechanical College, to open next autumn. —— The friends of Prof. Wm. F. Phelps, of the Minnesota State Normal School, at Winona, have presented a bust of him to the institution. The trustees did better years ago when they presented Prof. Phelps himself. —— Prof. Robert Curry, principal of the Curry Normal Institute, Pittsburg, has been appointed assistant deputy state superintendent of

Pennsylvania. The office was created in 1872, and Supt. Wickersham has taken a year to find the best available man in the State.——Supt. J. H. Smart, of Terre Haute, has been appointed assistant commissioner of Indiana to the Vienna Exposition.——A. P. Stone, of the Portland High School, and editor of the *Maine Journal of Education*, has been appointed superintendent of the schools of Springfield, Mass., with a salary of $3,500 a year.——A. D. Small, of Newport, R. I., has been appointed superintendent of the schools of Salem, Mass.——John Cooper has been appointed superintendent of the schools of Richmond, Ind.

——The forty-fourth annual meeting of the American Institute of Instruction will be held in Concord, N. H., July 8th, 9th, and 10th, 1873. Papers will be read by Prof. M. T. Brown, C. L. B. Whitney, Prof. Larkin Dunton, R. F. Leighton, Prof. W. N. Rice, ex-President Mark Hopkins, Prof. E. D. Sanborn, Dr. A. D. Mayo, Amos Hadley, Chin Laisun, and Prof. Sanborn Tenney. The more important topics presented in these papers include the study of history, the place of natural science in education, the teaching of the invisible by means of the visible (Dr. Hopkins), the American common school the national instructor in public virtue (Dr. Mayo), and the teaching of natural history in public schools.

Georgia.—The meeting of the State Teachers' Association, which occurred in Atlanta the first week in May, was much the largest and best yet held. The number in attendance was about two hundred. The addresses and papers are reported generally excellent, but, as we inferred when we saw the programme, there were too many of them and consequently too little time for discussion. The officers for the ensuing year are as follows: President, Rev. Dr. A. A. Lipscomb; First Vice-President, A. J. Battle; Secretary, B. Mallon; Treasurer, W. L. Stevens. We much regretted that another engagement prevented our accepting a most cordial and pressing invitation to be present. The next meeting is to be held at Macon, where steps have been taken to establish an efficient system of public schools.

The public schools of Atlanta have closed a successful year, their general management, course of study, and methods of teaching comparing favorably with those in schools much longer established. There has also been encouraging progress in discipline and schoolroom order. We congratulate the citizens of Atlanta on this auspicious beginning of its new school system, the chief source of its future growth and prosperity. The city has made and it can make no other investment which will yield so large returns.

Providence, R. I.—A few months since we had the long desired opportunity of visiting the public schools of this city. We had for years read the excellent reports of Superintendent Leach, and, as a result, we expected to find a system of schools possessing marked characteristics. One of the noticeable peculiarities was the evidence of thorough *drilling*. Whatever is taught is drilled upon until the pupils have it at their tongue's end or at their fingers' ends. As a result, the recitations are surprisingly prompt, rapid, and earnest. We have never seen more

rapid map-drawing. A class in one of the grammar schools drew an outline map of the states in the Mississippi Valley in about three minutes, locating the principal rivers, chief cities, etc. We can best say, at this point, that we were much pleased with the method in which geography is taught. The chief aim is to master the maps, and the descriptive matter is taught orally in connection with the map studies. But the hobby of the Providence schools is oral spelling. The drills in this branch are based on the theory that a knowledge of the meaning and use of words is not essential, or even helpful, in learning their orthography. The much ridiculed "nonsense" columns of the spelling book are believed in and faithfully and vigorously used. Leach's Speller is more thoroughly mastered than was Webster's in the schools of our boyhood. The classes are persistently trained to pronounce the syllables. We believe that Providence can safely challenge any other city in the country to compete with it in oral spelling. Much attention is also given to composition. The course of study and the methods of teaching generally embody the principle that the acquiring of correct habits of study, the formation of character, and the discipline of the mind, are more important than the mere acquisition of knowledge. The aim is not so much to make artisans as to make sharp and true men and women. We were not specially pleased with the organization of the High School. The two sexes not only occupy separate rooms, to which we do not object, but they are entirely separated in recitations. We noticed that they were not separated in the streets when going to and from school, and we see no reason why they should not recite together. The bearing of the boys in the several rooms which we visited, would have been improved by the presence of girls. The experience of hundreds of the best high schools in the country has demonstrated both the economy and the propriety of the two sexes reciting in the same classes. The recitations, which we heard, were excellent, with perhaps one exception. The school greatly needs a more commodious building.

The "vacation schools" and the evening schools are important features of the school system. The former are opened in different sections of the city for children who are obliged to remain at home during the hot weather, and their design is to furnish a refuge from the streets rather than to impose severe study. They are ungraded and continue in session six weeks. Sewing and drawing are taught in addition to other subjects. The evening schools meet the wants of a large number of youth who can not attend the day schools.

Ohio.—Otterbein University has closed an unusually prosperous year, and the trustees and faculty are looking for still greater prosperity in the future. The special feature of the last commencement was the address of ex-Vice President Colfax, before the literary societies.——Wooster University has closed its third year with an attendance of 139 students in the college classes, 50 in the preparatory department, and 71 in the medical department, located in Cleveland—an encouraging prosperity. ——Antioch College has a fine location and a good faculty, and its doors are open to both sexes, but, for some reason, it has few students. It

graduated but three students at the last commencement. Why do not the young ladies who are demanding collegiate advantages, apply to Antioch? —— The Ohio Central Normal School graduated its first class the 19th of June. The prospects of the institution have never been so encouraging.

HAMILTON COUNTY.—The meeting of the county teachers' association, held June 14th, was well attended. Rev. Geo. M. Maxwell, of Wyoming, delivered an address on "The Teacher's Example", dwelling specially on its influence on the pupil. Thomas M. Dill, of the Twentieth District School, Cincinnati, read a pointed and suggestive essay on "Moral Instruction." He urged that morality should be taught regularly, and he believed that it could be taught without religion. Mr. Dill is the author of a little manual of "Moral Exercises for Public Schools", which, we learn, is used with good success. It is unsectarian, but not without religion. Miss Butler, of North Cincinnati, followed with an essay, entitled "In the Schoolroom." She thought that teachers' theories were apt to be better than their practice, and gave some excellent suggestions on school work. Inasmuch as the new law allows teachers to dismiss school, without loss of pay, to attend the county teachers' institute, it was decided to hold the next institute in September instead of August.

BOOK NOTICES.

THE BEST READING. Hints on the Selection of Books; on the Formation of Libraries, Public and Private; on Courses of Reading, etc., with a Classified Biography for Easy Reference. Chicago: Jansen, McClurg & Co.

The main feature of this compact and elegant manual is the classified list of modern publications, English and American, now supposed to be in the market, with the publishers' nominal retail prices. This list is not complete, but is full enough for the purposes of nine-tenths of those who will ever have occasien to consult it. The names of books are given under the subjects of which they treat or the class to which they belong, which is very convenient for reference. To aid persons in making a wise selection of books, the editor has in some instances indicated those to be preferred for the purposes specified. The hints on courses of reading, the owning of books, book clubs, etc., are pertinent and valuable. We take pleasure in adding that the great bookstore of Jansen, McClurg & Co., in "Booksellers' Row," Chicago, contains one of the finest collections of standard works, in all departments, to be found in the country. Their shelves are loaded with "the good books of to-day and the good books of all time."

COLUMBUS, OHIO: Its History, Resources, and Progress. With Numerous Illustrations. By JACOB H. STUDER, Columbus, Ohio.

It was fitting that such a work as this should appear at a time when the evidences of the city's rapid growth are seen on every hand. Columbus has entered not only on a new decade of its history, but on a

new career of prosperity. Its citizens are very hopeful respecting its future, and, as a consequence, feel a special interest in its past history. The preparation of the work before us was evidently "a labor of love." Its materials were gathered with patient industry and used with good judgment and discretion. The first six chapters give respectively a succinct history of the city during the six decades from 1812 to 1872. The remaining portion, including some 500 pages, is devoted to the growth, resources and institutions of the city. If any of our readers in such little towns as New York, Philadelphia, St. Louis, or Chicago wish to learn of our glory and can not come and see it, we advise them to send for Mr. Studer's book. It gives 586 pages of facts and then modestly and wisely lets others sing our praise.

GOOD MORALS AND GENTLE MANNERS. For Schools and Families. By ALEX. M. GOW, A.M. Cincinnati and New York: Wilson, Hinkle & Co.

We have examined this work with much interest and heartily wish that its important truths and suggestions were pondered by every youth in the land. It is worthy of a place in every household and it can but prove an important aid to all teachers who appreciate the necessity of regular instruction in morals and manners in our schools. We are not satisfied that such a work is needed as a text-book for the study of pupils in elementary schools. It seems to us that these subjects are best taught orally and by constant appeal to the conscience and the pupils' sense of propriety. But we can heartily commend the work as a manual for the teacher and the family. It is published in superior style.

HADLEY'S LESSONS IN LANGUAGE. An Introduction to the Study of English Grammar. By HIRAM HADLEY. Revised Edition. Chicago: Hadley Brothers, 1873.

We are glad to learn that this excellent little manual is having a large sale, for it richly deserves it. It contains an eminently teachable series of language lessons, and, when intelligently used, it can not fail to prove a valuable guide in this important department of elementary instruction. The latest edition shows that the enterprising publishers intend to make the book as nearly perfect as possible.

THE SCHOOLDAY MAGAZINE; For All Homes and Schools. Philadelphia: J. W. Daughaday & Co. Price $1.00 a year.

The design of this well known juvenile magazine is to afford instructive reading and rational amusement for the little folks at home, and fresh and interesting reading matter for the schoolroom. Its value in each of these directions has been long and widely tested, and its continued popularity is evidence that it has not been found wanting. It has been successfully used in many reading classes. Subscriptions begin with the January or July number.

GEO. E. STEVENS & Co., Cincinnati, announce the publication of a series of monthly papers with the title of the "School and Home." The

object is to furnish reading lessons in addition to those in the second and third readers—lessons that will be fresh and attractive, and thus add new interest to the reading exercise. The numbers will be edited by Mr. E. O. Vaile, of the Woodward High School, Cincinnati, and the articles will be original, selected, and adapted from the children's stories of the day. This is a praiseworthy enterprise, and the first number, already issued, gives promise that it will be successful. The price of 100 copies is $1.50.

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Vol. III. AUGUST, 1873. No. 8.

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(*Continued from the May number.*)

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Third year: Oral and written multiplication and division of numbers within limits of smaller multiplication table (10X10); oral and written addition and subtraction by numbers less than 100 within the limit 1 to 1000; written addition and subtraction by numbers less than 1000 within 1 to 1000—all in both concrete and abstract numbers.

Fourth year: Oral multiplication and division within limits of greater multiplication table (20X20), but *without memorizing*, concrete and abstract; written exercises in the four fundamental rules with larger numbers.

Fifth year: Knowledge of Badish weights and measures and of current moneys; oral and written reduction, ascending and descending; easy examples in application of four fundamental rules to denominate numbers (time excepted), oral and written.

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First year: Voice and ear exercises, catching and repeating notes sung before, within limits of first five tones of the (major) scale; marking simple time; singing child songs.

Second year: Voice and ear exercises extending through whole octave (major); distinctions of tones as high and low, long and short, strong and weak; simple songs within an octave.

Third year: Representing tones by figures, exercises in the numeral (musical) scale, exercises in double and triple time; application of foregoing in suitable songs with one part.

Fourth and fifth years: Notation of tones by round notes with scale exercises; extension of scale above and below the single octave; $\frac{4}{4}$ and $\frac{6}{8}$ time, time notation and rhythm; two-part singing begun, and church songs.

Seventh and eighth years: Continued scale exercises, raising and lowering the "pitch"; simpler scale transformations; two and three part singing, and church songs.

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Second year: Speaking on neighborhood animals, plants, and minerals—their uses and hurtfulness; likewise on manufactured objects of common use and their preparation by various industries; instruction in treatment by children of animals and plants as well as of persons.

Third year: Continuance of natural history conversations; home topography, *i. e.*, within the child range.

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Text-books not used; only wall maps and a set of geographical tables with small cheap outline maps for map drawing.

Children buy these for half a cent each, copy and fill them in.

NATURAL HISTORY. This, like geography, begins with the fourth year, where "observation" lessons end. On the basis of personal observance, under the teacher's direction, the pupil is to give, as independently as possible, descriptions or discussions of natural objects, giving his observations in his own words, while the teacher makes needful correction as to facts or language, and supplies any pertinent omissions in easy narrative or description. To impart interest to the object under treatment, and further awaken while instructing the child-mind, there are to be connected with these lessons the purposely arranged reading-book narrations and descriptions of the life and habits of domestic and foreign animals exhibited in pictures, of the cultivation and uses of domestic and foreign plants, the obtaining and uses of minerals, etc. In the selection of natural objects for discussion, respect must be had to their easy procuring, representative character, and intimate relations to local industries and interests.

Fourth year: Observation of a number of animals, plants, and minerals.

Fifth year: Continued discussion of animals and plants, including foreign kinds, with primary grouping according to similarities, as well as of a few simple and mixed minerals; instruction on the human body.

No books besides reader, which contains much natural history, picture cards, and a few tables for teacher's use. German school-book stories are supplied with cheap outline prints of animals, plants, etc., of which children buy immense numbers and fill in with colors.

FORM-TEACHING AND DRAWING. These, beginning with the sixth year, are somewhat complementary with geography and map drawing and supplementary to natural history (by representation). The beginning of geometrical and free-hand drawing is made in connection with form-instruction. Form-instruction of girls is limited to a knowledge (recognition) of the common geometrical forms, customary measures, and measuring of direct lines—their instruction looks particularly to *drawing*.

Sixth year: Knowledge of various lines, angles, and simpler plane figures; measuring of lines and angles; drawing, by eye-measure, of geometrical (plane) figures of specified size; free-hand drawing of geometrical plane figures, including circles and various curves.

Seventh year: Calculation of plane surfaces and drawing combinations of planes; free-hand drawing of plane figures combining straight lines and curves.

Eight yearh: Knowledge and discussion of simple geometrical bodies; calculation of cubic contents; drawing of groups of bodies, free-hand drawing of curved-line figures.

Blackboard, wall cards, and real objects supply all copies, while slate, paper, and pencil are the only materials.

HISTORY. This, begun in the sixth year, is made complementary to geography, and limited to presenting and impressing single characteristic, historical passages (corresponding somewhat to biographically treated history), so arranged and combined chronologically and locally as to afford a connected representation of the course of history. The method consists of simple narrations by the teacher with repetitions by pupils and emphasis on important passages and dates.

Sixth year: Views of Badish and German history to about A.D. 1500.

Seventh year: Views of Badish and German history continued to the present.

Eighth year: Select views of ancient history; historical views of progress of modern civilization, including important inventions and discoveries; the more important part of the constitution and political organization of Baden and Germany.

No text-book used, but much reference made to reader.

NATURAL PHILOSOPHY. A few of the more important laws of nature are to be brought to the knowledge of the pupils by simplest experiments and in connection with observation lessons. What is observed is systematically drawn from the pupil in his own language, subject to correction in matter and form, thus giving a basis of systemized observation of natural phenomena whence are deduced by the pupils themselves as far as possible the phenomenal laws. Repetition and discussion are the means of fixing what is learned, while the reading book again supplies a fund of auxiliary material. This is more especially *eighth year* instruction, and embraces an introduction to the more important phenomena and laws of gravity in solid, fluid, and gaseous matters, of acoustics, heat, light, magnetism, and electricity. *No text-book is allowed.*

Physical exercises (turning) and needle-work are sufficiently un-American to require separate treatment, if treated at all.

Carlsruhe, May, 1873. WM. H. YOUNG.

ORAL TEACHING.

A while ago I was in conversation with several educators, two or three of whom were practical teachers, and the subject of the true ideal of the work of a grammar school came up. It was admitted on every hand that no theme relating to popular education is less determined at the present time than this; and one of the teachers in our company, a young, fresh, progressive man, declared that he felt as if afloat on the broad sea without compass or rudder, in regard to this vital question; that a cloud envelops his courses, which renders his purposes aimless, and chills his enthusiasm, and, being perplexed by antagonistic theories, he hesitates by what headlands to shape his course.

The older heads among those present,—with one or two exceptions, not being fossil specimens of the palæozoic age,—pronounced this a very hopeful state of things. It proves that the leaven of reform has been thoroughly working, and has accomplished so much already as to divide the field with the dogged conservatism which it would perpetuate. And the conviction was expressed, that let the noble corps of reformers but follow up with faithful perseverance the advantage already gained, careful to demonstrate wherein what they stigmatize is erroneous, and to advocate no changes which can not be proved to be reforms, and it will not be long before the whole field will be won, and our grammar schools be worthy of the applause which, falsely in some regards, they now arrogate to themselves.

Then the talk turned very naturally upon what were likely to be the constituents of a reconstructed and satisfactory course of study. I had not long before been reading in the Boston Advertiser the letters of Mr. G. B. Emerson, that veteran philanthropist, who has written and said in his life so many good things on the subject of education, in which, criticising the Boston schools, he pleads for a place for the knowledge of common things,—knowledge of nature, science, art, animal, and vegetable life, in those particulars in which they meet us at every turn, and minister to our needs and our pleasures,—so that links of connection may be established between the routine of school work, and the realities of the outside world; and boys be instructed in the mechanical and philosophical principles of the arts to which their lives are to be devoted; so I remarked, quite earnestly, referring to these letters, that Mr. Emerson is right, eminently right, and this information must be given in

our schools. I added my humble conviction that it is to be communicated, as Mr. Emerson himself urges, not by means of text-books to be studied, but of interesting books to be simply and enjoyably read, and also by means of well-illustrated and systematized oral teaching.

At this, one of the teachers present set his teeth, doubled his fist, and burst forth in rejoinder:

"All the talk about oral and object teaching is sheer humbug. In whatever form you may introduce it, it will be a sham and a failure. It is a comparatively poor instrumentality even when adults are the subject, and is all the more ineffective with children. Passive listening to the talk of teachers, plants very few mental seeds. If what is heard does not go out at one ear about as soon as it goes in at the other, at least it becomes such a jumble in the memory as to be little better than no knowledge at all. No; let us have elementary studies taught by the good old method of hard, regular taskwork,—lesson and recitation. Hard work over the printed page,—work for the memory,—drilling the subject-matter into its substance so that it will be permanently held there, is the only trustworthy course."

A second teacher added no less emphatically:

"True, and, what is more, oral teaching does not discipline the mind. It is too disjointed and fragmentary. Now, I believe that the studies pursued in our schools should be so managed as to discipline the minds of the scholars."

There is a vital truth in each of these statements; a truth, however, which, when acted on without due modification, is as pernicious as the baldest error; and, I grieve to say, that there are hosts of teachers who, blindly and stubbornly accepting such reasoning as conclusive, without modification, maintain their schoolrooms, which should have their atmosphere always full-charged with mental electricity, all quivering with vitality, as places where formal rotework is daily repressing and gradually paralyzing the powers of the able, and rendering more stolid than ever the stupidity of the weak.

So I propose to say a few words in this paper about oral teaching as a method and a discipline.

First, as a method, in reference to the position that what is taught orally does not inhere in the memory, while what is learned through taskwork is a permanent possession. This is unsound reasoning in every particular. In the first place, all that we learn by means of memoriter delving does not stay by us, even when that delving has been most faithfully performed; and praise be to a kind Providence that it is so, else what an

awful mass of useless lumber the scholars of most public schools would have in memory! Put a class under fourteen years of age upon any study involving numerous details, such as geography, or history, and do your best with them by means of rote-work. Tie them down to their text-books day after day; hear them recite the same pages over and over again; review them and re-review them. Then let a few months elapse without recurrence to that subject, and after such an interval take them upon it once more; and what halting, defective work they will make of it. In fact, this treachery of the memory is so universally admitted by teachers, that it dictates the practice of schools in many regards. For instance, it is on this account that the pedantic examinations for admission to high schools—why will school committees still continue those arbitrary, unphilosophical tests!—are arranged invariably so as to follow close on the heel of the laborious drill which has prepared the candidates for them. For, were a few weeks suffered to elapse between the drill and the test, so much would drop out of memory in the interval that the blunders of even the best scholars on memoriter details would put their teachers to shame. Indeed, let any adult, unless he have an exceptional memory, marshal his childhood's acquisitions in array, and of all that he learned through hard delving taskwork, how little will be found to remain.

Now, take the other side. Of our living recollections, which are perhaps like sunfires along our pathways, how many were imperishably stamped on our memories by some single and instantaneous stroke, as, for instance, a chance remark from another's lips! How many such a recollection, with its perfected outlines, was thus flashed into the mind, just as the sun photographs its image by one gleam of its ray! Take out from one of our grammar-school classes a child who comes from an intellectual home. As is well known, such a child, if possessed of good parts, stands far in advance of his less fortunate mates in many particulars. He is largely furnished with knowledge in comparison with them. His mind touches almost every subject which may be introduced, at many points. He learns easily, because so much is already known to him, and he possesses so superior a vocabulary. Now, how did he acquire this various knowledge—this vocabulary? By drill through taskwork? Never. Only by reading and listening; a single stroke, in almost every instance, making the permanent mark. The

circumstances were favorable. His mind was on the *qui vive*—aglow with curiosity, eager, receptive; and what it received it kept.

Thus, it depends on the condition of the mind, on the measure of its receptivity, whether the memory will take up what may be put before it and store it away, and not on the form in which it may be presented; and to excite this right condition of mind, a plastic sensitiveness, an eager curiosity, a tenacious receptivity in connection with the studies of the schoolroom, so that what may be taught will be remembered, is one of the most vital of the problems which should be quick in the teacher's regard. Let him rest assured that he can not induce it by mere rotework,—no, not though he stand over his class hour after hour, cowhide in hand, ready to give a stinging cut to any scholar who may lift his eyes from his books, and makes them delve until every word can be recited as glibly as it is in the power of the organs to utter it. It is the product of enthusiasm in the live suggestive teacher kindling a responsive enthusiasm in his scholars,—life begetting life,—thought begetting thought,—so that their minds will grasp and appropriate the truths and facts which may be presented. It is thus that illustrations should be made to cluster around the lessons from the text-books, and impart to their otherwise dry and prosy statements a juicy richness and an attractive charm; and that such topics of general interest as have been referred to, outside the regular studies, should be set forth in forms so engaging as to be delightedly heard,—in a spirit of eager curiosity, and, because so heard, retained.

It is in large measure through the use of the eyes and the ears, not in taskwork by any means, but in the most desultory, fragmentary way possible, here, there, and everywhere, at home and abroad, that the senses and observing powers acquire the stores of that knowledge which is the material of thought. Lord Brougham said that if all which a child learns during the first two and a half years of his life, were blotted out from his memory when he becomes a man, so much of the groundwork of his knowledge would be gone as to render him helpless in his ignorance. This is true; and, in imitation of nature in her method in this regard, let the teacher value oral instruction as a mighty instrument in his hands. Only he must be sure that *mental curiosity* is vividly awake and craving before the food is given.

Now, a few words respecting the objection that there is no *discipline* in acquiring knowledge by means of oral instruction. I am in the habit of going to nature for guidance, and I shall trust her lessons to the last. I do not believe any wiseacres of this generation will improve on her methods. There have been those who have thought they could have created man and his surroundings to better advantage than God has done; but I believe they have convinced none of their superior ability except themselves. I have faith in the ordering of nature; and since she provides that a child shall store up immense resources of facts in a desultory, fragmentary, unsystematic way, I have confidence in the superiority of that way. If there is no discipline in it, then plainly there is no need of discipline in such a connection. Not one word more need be said.

No doubt some of the information thus communicated will elude the memory under the best of circumstances; and still more will make impression with less precision than may be desired. To remedy these defects, let the scholars be required to take notes of every oral lecture and write an abstract afterward. No school exercise, for various reasons, is more valuable than this.

When about to write this last paragraph, it crosses me that I have been presenting suggestions and arguments which are as familiar as the alphabet. Still, there is a field of information of the utmost importance, which must be cared for in our grammar schools. As yet it is fallow. It is to be tilled by means of oral teaching, and until its neglect shall be visited as a gross defect and wrong, such suggestions and arguments must be repeated with all the emphasis the true friends of education can command.—H. F. HARRINGTON *in* "*The Teacher.*"

HINTS ON THE TEACHING OF READING.

It is said by many teachers that reading can not be made interesting. They assert that other school exercises present some variety, and the mind of the pupil is easily led along in new paths, but that the reading lessons are a never failing monotony. There are the same stories to be read over and over again, until both teacher and pupil are weary with the unvarying routine of anecdote. Every new thought under the sun in re-

gard to John's new sled and Mary's little lamb has been called forth, while the history of the old hen and her chickens has been discussed and rehearsed until even the ashes of her ancestors have been evoked to bring forth things new and old for the entertainment of the little ones.

Inasmuch as reading is the most important exercise in our schools, there is no question connected with teaching more worthy of study than the best method of making the reading lesson interesting and attractive to the young. This is more needful than the obtaining of good drills in gymnastics or the adoption of the most effectual means of securing the attention in the music lesson.

The reading exercises should be made a pleasant recreation, not an enforced task. The pupils should come to it with beaming eyes and happy faces, and the half hour should be one of unalloyed delight. This can not be accomplished by keeping their eyes fixed upon the book by the discipline of the dark ages, but the lesson must be made so interesting, so fraught with new and pleasant thoughts, that the undivided attention of the pupils will be given unconsciously and willingly.

We are aware that this requires something more than mere method. There must be the exercise of much care, patience, diligence, and an earnest perseverance in well doing. To make the reading exercise attractive and interesting, the teacher must throw her soul into it. She must bring to it such interest and zeal that the pupils will see the sparkle and fire in her eye, and catch the inspiration in her voice and manner, and be thus unconsciously led into the glad spirit of the exercise.

This pleasant, joyous enthusiasm of the teacher is the most important element in the schoolroom. Without it no one can hope to succeed. A dull lethargic teacher, sluggish in her movements, can hardly fail to produce a corresponding lethargy in her pupils, and a recitation conducted by such a mind will become an unmeaning routine, tiresome in its details, and begetting only disgust in the pupils.

Another necessary characteristic of the reading exercise is, that the pupils be taught to read *intelligently*. This requires that the pupils be not only able to call each word at sight, but that they know the meaning of each word, the meaning of each sentence, and the import of the lesson as a whole. As means of securing these results, we have found several plans quite effective. We do not suppose that they are better than others

used by many teachers, but we offer them with the hope that they may assist some young teacher.

Let the reading class come to its recitation with the books closed. Under the supposition that the lesson has been studied, question the pupils promiscuously upon the lesson. Take up the story as a whole, reviewing it orally in all its several parts and relations, until the pupils have acquired a good understanding of the whole lesson. In this manner many new ideas may be elicited; question and answer will pass with a delightful rapidity, and the interest and life of the recitation will be greatly increased.

When a suitable amount of time has been spent in this manner, the pupils may open their books. The teacher then goes to the board, and, with chalk in hand, calls upon the children to give her the hard words they have found in their lesson during the morning's study. She may first call upon John who pronounces a word, which he is required to spell, and the teacher, at the same time, writes it upon the board. She then calls for other words from other members of the class, which are written on the board, and she thus proceeds until all the difficult words are written down. Then, taking the pointer, she goes over these words with the class in concert, the children pronouncing the words first, and then spelling them. After this, the words may be passed over promiscuously, the teacher saying, "What is this word"? "and this one", etc. Different children may also come to the board, and, pointing out the words, name them. In this way, the exercise may be varied, and the children become familiar with the words, knowing them at sight, thus avoiding routine and monotony, and creating a pleasant variety.

When this work has received its proper share of attention, we have found it a very good exercise to talk over the meaning of each word with the pupils, and to require them to give sentences embodying each one of the words upon the board. I ask John, for example, to give me a statement with the word *wrong* in it; to say something using the word. He says immediately, "*It is wrong to hunt bird's nests.*" I then may ask if any one else can give me a statement containing this word. Several hands will fly up, and a number of sentences may be given, as many as time and interest will permit.

In this manner all the more difficult words are taken up, and the pupils gain a fair understanding of their meaning; they

also learn to recognize the words at sight without difficulty, and much of "rote" reciting will thus be effectually overcome. When there are words whose meaning the pupils do not understand, the teacher should explain them either by suggestion or illustration. After these preliminary exercises, it will be found that the children will be much more alive to the matter of the lesson, more active and wide awake, more interested, and more desirous of acquitting themselves well, than when the reading is immediately begun.

The books may now be opened, and the reading—the principal work of the recitation—commenced. We have usually found this the most difficult part of the exercise. Children's minds being so apt to become listless, when anything is required that demands attention upon the book. To obviate this difficulty, we have found it especially beneficial, when a pupil has read a short verse or sentence, to have him close the book, and give the same ideas in his own language. In this way he gets the meaning without the constant use of the same set words and phrases, and thus he has a discipline in clear and lucid expression, and, at the same time, he is saved from learning the lesson by rote.

There are also some old methods, but none the less useful because old, which we have found productive of much good. One of these is reading backwards. Beginning sometimes at the head of the class and sometimes at the foot, the first pupil pronounces the last word of the lesson, the next pupil the next word, proceeding thus until the whole exercise has been passed over. The pupils must be required to do this in a brisk, energetic manner, no time being allowed to elapse between the words. This will oblige each one to give undivided attention in order to keep the place and pronounce his word in his turn, and the pupils are usually delighted with the exercise, as it brings their minds into such activity.

If, in all these general plans, we endeavor to exemplify the first principles of Pestalozzi—*activity is a law of childhood; accustom the child to do; educate the hand,*— we shall find the enthusiasm of the pupils increased, their interest more effectually aroused, their eyes brighter, and their tasks will be performed with a greater alacrity, while each will feel that he has something to do, a part to perform, thus making the schoolroom symbolical of his after life, and preparing him by active and useful work, to take his place in the broad fields of usefulness that

await all those who endeavor to perform the service of a loving Master in faithfulness and trust.

We have found one difficulty in teaching reading, which no available experience surmounts. The children read and re-read the same lessons so many times, and hear them repeated so constantly by other pupils that they learn them by heart. We once had a pupil in school, who could repeat the Second Reader from the beginning through, with scarcely a mistake, and it was impossible to obtain from him an intelligent and passable recitation. This was the direct result of using one series of text-books, and we have many times felt that our condition was almost superior when we taught in the old log schoolhouse, and each pupil read from a different book.

To break up this committing of the lesson in this manner, and place something new in the hands of the class, we have resorted to the use of children's papers. Usually a large number of some one paper is taken by the children, and we have desired them to bring these to school, and thus we have obtained new stories and pieces for the reading exercise. This has always resulted in a marked improvement in reading. The pupils come to their class with greater alacrity and interest, the question every day being asked, "What shall we have for our next lesson?" "What is the next story about?"

We would not say there should be no uniformity of text-books in our schools, but we do claim that in our primary schools this uniformity should not be adhered to in quite so rigid a manner. When a change in reading lessons is desirable, it should be made, though uniformity be somewhat sacrificed, and in nine cases out of ten the primary teacher is a better judge of the wants of her pupils than any school board can be, and yet how seldom in the regulation of school affairs is the opinion of the teacher even asked, much less respected. It is the usual supposition that *a woman does not know much in particular*, but there are many times when she could tell a school board some things to their especial advantage!

We have no plan to offer, but we have often wished that some method might be devised by which our primary classes especially could oftener have a change of reading lessons. We believe that it would result in better reading, more hearty enjoyment of school work both by teacher and pupil, a greater love for the schoolroom, and an increased desire for books and culture.

S. C. STERLING.

GOOD WRITING.

There are two or three things more or less essential to the command of a chaste, vigorous, and noble speech.

1. A sweet and hearty affection for nature. This made Walton the only classic of his time, and has kept fresh for centuries the noble wit of Chaucer. To this the soundest literature of all times owes that pure vigor which is as much an element of valuable writing as it is of all valuable thinking and doing.

2. True and high companionship. Nothing in many ways gives one such solid furtherance as occasional contact with elevated and vigorous natures. It teaches him, as nothing else can, the true excellence of fresh and living speech. It stimulates also by that greater bounty and vigor which lie back of speech in the strongholds of character.

3. A true and searching acquaintance with a solid and vigorous literature. The one fine and incorruptible test of greatness in literature, as in all art, is, that it should be simple and true. Remark the excellence of Montaigne. How simple the old man is, and yet how finely he appeals to one's highest experience. We marvel at his plainness, and yet gradually as we read him, we find that he is master of all the finer and solider elements of style.

Study, if in a vigorous and heroic mood, or if you wish to be put in one, the more modern Emerson,. Here, certainly, is a true writer, and one who writes only to true readers. How he fortifies us with his clean, solid wisdom, and how fit is the utterance he gives it. Read for a fine example of scientific style, the clear, full-brained Spencer, and see how admirably this man recognizes the simple greatness of thought and speech.

The valuable thing in letters, says Mr. Matthew Arnold, a noble master of clear and graceful English, is "the acquainting one's self with the best which has been thought and said in the world." In this sense reading is a noble exercise, and only less valuable in the formation of style than in the conduct of life.

But adapting the language of advice, let us compress all this into a few clear sentences, which will better cleave to the memory: Read noble books. Learn to love high and sincere art. Cultivate the acquaintance of vigorous men. Live close to

nature. Love the sod. Thus will your knowledge become rooted in character, and bring forth fruit in noble art and still nobler conduct. E. S. Cox.

FACT AND FICTION IN TEACHING.

"Triplet", in "Peg Woffington", had two styles of composition, thus:—

"Triplet's Facts."	"Triplet's Fiction."
"A farthing dip is on the table."	"A solitary candle casts its pale gleams around."
"It wants snuffing."	"Its elongated wick betrays an owner steeped in oblivion."
"He jumped up, snuffed it with his fingers; burned them, and swore a little."	"He rose languidly, and trimmed it with an instrument that he had by his side for that purpose, and muttered a silent ejaculation."

Let us call our brilliant plans the fiction; and the working of them the fact. Inspiration never comes when you want it, and your putting it to practical use is something like the writing of a letter after your budget of news has grown stale; or the writing of an essay when "genius does not burn", and you have to "scratch your pate and feel for brains in vain"; or like the fate of that incisive speech that you composed through a walk of two or three miles, and did n't speak six sensible words thereof, after all. The bright thoughts generally come when you ought to be asleep, or on a Saturday, when, instead of "Rowing along, thinking of nothing at all", you are bowling along to teachers' meeting, the rumbling of the car keeping time to the song you are rehearsing—for them; or when, after an unsatisfactory day in school, you read Prof. Milo's advice to young teachers, and find yourself guilty of all the crimes in the pedagogical calendar, and promise yourself to be good, and not scold any more, and suddenly recollect "poor Benny" and "dear Clara" with contrite affection. Next morning, they do n't seem *quite* so "poor" and "dear", but improvement is your plan—and now for the test:—

Fiction.	Fact.
I.	
Not to speak a hasty word for one hour at least.	Stormy morning, found children in the room. Largest boys standing round the fire, and snow dripping from boots on the clean stove. Opened the door, and sent every one to brush his shoes, and then to take his seat. Serious countenance, to say the least.
Try very hard to smile most of the time.	

FICTION.	FACT.
II. To have perfect unison in writing; graceful position at desks, and simultaneous completion of every line.	"Pencil broke", "lost", "too dull", "too short", "book to home", "sore finger", "can't write to-day." Ambitious penman a whole column in advance, and busy *with ornamentation.*
III. Class to go through a gymnastic exercise with military precision. Call in Miss Petowker to see them.	Thomas leaning on a desk for support. Jimmy standing on one leg. Simon struggling to turn his toes *in* till they meet. Mary, "sore arm", Susan, "headache", Bessy, "pain in side". Charles hitting the meek Henry in the back. Army ingloriously routed to their seats. Commanding officer thankful that no one "reviewed."
IV. "Oh Harmony! My hearts delight!" They shall soothe themselves and me, too, with sweet sounds, like those of the dear little chorister boys in church.	Shouting like children in distress, or else too idle to open their mouths. Mercenary creatures will say, "Property I'll ne'er despise", instead of "Poverty I'll ne'er despise."
V. Take occasion to praise Tommy, not for excellence, but for industry. Thank him for the key-ring he substituted for a piece of ribbon.	Keep him after school (noisy) until he is forced to use his little illustrated handkerchief to wipe away about three tears.
VI. (Very Fantastic.) Admiring boards of education, promising promotion for thoroughness, and "eminent success."	An excellent theorist, this person, Miss Peecher; but she's certainly *not* a very good teacher.
Arrived at home, tired, but complacent. Have "earned a night's repose". How sweet is rest after duty!	Out of temper, moody and fretful, lamenting failure, yet giving model lessons to an invisible school of "seraps" (seraphs)—who *don't* drop their pencils, nor rattle their slates—somewhere between the hours of 10 P.M., and twelve, midnight. In vain you try to dismiss the class by repeating the subtraction tables. They are stationed somewhere near your bed in spite of "ninety-six less eight", one hundred and three less nine", and "one hundred take away four till there's nothing left."

Then, to dream of a procession of pilgrims, carrying no excelsior mottoes, but some banners with these strange devices:

"Sic transit gloria" Good Intentions!

Be not so stingy of your affection, lest it be said of you by some slighted child,—

"She never told her love."

Speak those encouraging words before it is too late.

Take not so much notice of precocious pupils.

Keep——still! Keep——your temper!

The last pilgrim comes slowly, and bears this motto in immense letters on a sad looking banner:—

Improve, improve, improve your *opportunities!*

Exit.

Cleveland, Ohio. H. C.

EXAMINATION QUESTIONS.

The following questions were recently presented to a class of applicants for certificates to teach in the public schools of Columbus, Ohio. The examination continued two days:

Theory and Practice.

1. What is meant by the objective method of teaching?
2. Why should this method be used in teaching little children?
3. What do you understand by teaching a rule inductively? Give an illustration.
4. What are the advantages of the written method of teaching spelling?
5. What are the characteristics of a good question? Of a good answer?
6. What ends should the teacher seek to attain in the government of a school?
7. What is your opinion of the "self-reporting system"?
8. What are the objects of punishment in school?
9. What is your opinion of the use of prizes as an incentive to study?
10. What moral qualities should the teacher carefully cultivate in his pupils? How can this best be done?

Orthography.

1. Into what three general classes are the elementary sounds of the English language divided? Give examples.
2. What sounds compose the words *again* and *bouquet?* Write each word phonically.
3. How many and what sounds has *ch?* Give examples.
4. What is a diphthong? Give examples of *proper* and *improper* diphthongs.
5. Divide the following words into syllables, mark the accent, and also the vowel sound in each accented syllable: *inquiry, industry, interesting, irrevocable, maintenance.*

The following words, pronounced by the examiners, were spelled by the applicants in writing: arrogant, abhorrence, pursuing, inflammable, antecedent, votaries, irascible, niggardly, unsullied, connoisseur.

Reading.

1. What is emphasis?
2. How may errors in emphasis be best corrected?
3. What is meant by inflection?

4. What three conditions are essential to the correct reading of a sentence?
5. When may "concert reading" be used with advantage?

[Each applicant also read selected paragraphs.]

Geography.

1. Give two proofs of the spherical form of the earth.
2. In what direction does the earth rotate on its axis, and how many degrees does it move per hour?
3. What would be the relative length of day and night if the earth's axis were perpendicular to the plane of its orbit?
4. Which pole of the earth is now in continual darkness? Which will be next December? Why?
5. What are the three principal causes or circumstances which affect climate?
6. Why do so few large rivers flow from the Western Continent into the Pacific Ocean?
7. Name all the states that border on Lake Erie.
8. Name the four largest cities in the Mississippi Valley, and give the location of each.
9. Name all the countries of Europe that border on the Mediterranean Sea (not including the Black Sea).
10. Draw an outline map of Ohio, locating the four principal rivers and the five largest cities.

English Grammar.

1. Write the possessive form of the plural number of *child*, *parson*, lady.
2. Give all the participles of the verbs *go* and *write*.
3. What is a regular verb?
4. What is meant by the person of a verb?
5. Why are not intransitive verbs used in the passive voice?
6. What parts of speech may the word *that* be? Give examples.
7. What is the mode and tense of each of the verbs in the sentence, "Let justice be done though the heavens fall."
8. Give the case and government of the nouns in the sentence:

"And Twilight gray
Had in her sober livery all things clad."

9. Parse the first two words in the sentence; "Being poor, he was industrious."
10. What is the difference between a compound sentence and a complex sentence? Give examples.

Arithmetic.

1. In simple subtraction when the figure in the minuend denotes a number less than that in the subtrahend, how is the operation performed, and on what principles does it depend?
2. What is the difference between simple, compound, and denominate numbers?
3. Explain the principles involved in inverting the divisor in the division of fractions.
4. A ship starts from a point in North Latitude 15° 20′ and Longitude West from Greenwich 20° 45′, and sails to a point South Latitude 30° 50′ and Longitude East from Greenwich 10° 30′; has the vessel gained or lost in time, and how much?
5. Reduce the following expression to a decimal fraction, carrying it to four decimal places:

$$\left(\frac{5\frac{1}{3}}{7\frac{1}{3}+\frac{1}{2}} \times \frac{\frac{1}{3}\text{ of }2\frac{1}{2}}{4\frac{1}{4}-\frac{3}{8}}\right) \div \frac{25}{3}$$

6. The average enrollment in a school for one week is 75 scholars, the average attendance is 48; what is the per cent of attendance?

7. "$256.00. COLUMBUS, O., *April* 10, 1873.

"Nine months after date I promise to pay to the order of John Doe two hundred and fifty six dollars; value received.

"RICHARD ROE."

What was the legal value of the above note on the day it was given?

8. What is the above note worth now at a bank discounting it at 8 per cent per annum?

9. Bought Hocking Valley Railroad stock at 40 per cent below par, and sold it at 20 per cent above par; what was my per cent gain?

10. The surface of all the sides of a cubical box is 1176 square inches; what is the length and breadth of one side?

HISTORY.

1. What were the results of the French and Indian War?
2. How and from whom was Florida acquired as a possession of the United States?
3. What do you understand by a "protective tariff"?
4. Name all the wars in which the United States have been engaged, and the causes of each.
5. Give the names of the Presidents in their order, the length of time each served, and the year each was elected.

CONSTITUTION OF THE UNITED STATES.

1. What are the three branches of the United States Government, and in whom or what is each branch vested?
2. What are the general functions of each branch?
3. Describe the method of choosing a President of the United States?
4. What are the various provisions for supplying the place of the Chief Executive Officer of the Government in the event of his death or removal from office?
5. How can an alien become a citizen of the United States?

PHYSICS.

1. Explain the principle on which the steam engine operates.
2. Which is the best solvent, hot water or cold, and why?
3. What is a barometer? Explain the principle on which it acts.
4. What are the main principles on which Morse's Electric Telegraph depend?
5. What do you understand by the correlation of forces? Give illustrations.

BOTANY.

1. What are stipules?
2. Define venation.
3. Name the parts of a grass leaf.
4. Name the different leaves on the blackboard. (Fig. 1, 2, 3, and 4.)
5. Name and draw at least five different shapes of stems.

DRAWING.

1. In drawing horizontal lines, how should the arm be held?
2. In drawing vertical lines, how should the arm be held?
3. What is an inclined line? In how many directions can it be drawn? Give an example.
4. How can you ascertain the inclination of a line? Give an example.
5. Draw and shade the example given on the blackboard.

PENMANSHIP.

1. What is the first instruction to be given in teaching writing?
2. Define *base line, head line.*
3. Name the three simple movements in writing.
4. Write a set of capital letters.
5. Give the analysis of the capital T.

Write the following as a specimen of your penmanship:

"Too low they build, who build beneath the stars."

MUSIC.

1. Of how many lines and spaces does the musical staff consist?
2. On what line is the G clef situated?
3. Write the scale of C major with quarter notes in $\frac{2}{4}$ time.
4. If we number the C scale, counting C one, which are the two small steps (seconds) in letters and numbers?
5. What scale follows the C scale in sharps?
6. What is the large second from C?
7. Write the signature and scale of G major in $\frac{2}{4}$ time.
8. What does each measure contain in $\frac{2}{4}$ time?
9. How does a dot influence a note after which it stands?
10. Analyze the music on the blackboard.

The above sets of questions were prepared by the different examiners, and hence are not uniform in their requirements. The lowest average per cent of correct answers was in arithmetic, and the next in orthography—in reply to the five questions. Only the applicants for positions in grammar schools answered the questions in physics and botany.

We add the answers to the questions on "Theory and Practice", given by one of the applicants—a lady of five years' experience in teaching. The time allowed was about one hour:

THEORY AND PRACTICE OF TEACHING.

1. By the objective method of teaching is meant that method which aims to instruct by means of objects. It aims to bring the object before the children in order that from this tangible object they may obtain real knowledge.

2. This method should be used in teaching children because it brings into use the perceptive faculties, through which we must necessarily first obtain our knowledge of the outer world, and, of course, these faculties must be first cultivated. Then children remember better that knowledge which they obtain by the use of their senses, in examining visible, real things.

3. By teaching a rule inductively, we mean teaching by means of example; that is, explain an example so thoroughly that every pupil understands every step; then allow each one in his own lauguage to tell how he performs the example, which is really the rule. By correcting the manner of expression, dropping unnecessary words, they will very

soon see that they themselves have made a rule which is almost precisely like the one given by the author.

4. We make use of our knowledge of spelling almost entirely in writing. Consequently a large part of our drill in teaching spelling should be written. Then, too, in spelling we are guided a great deal by the form of a word, and this form is only brought before us by writing and printing. Another great advantage is, that it gives a drill in both spelling and writing. In other written exercises, want of time necessitates hasty and, consequently, careless writing; but in a spelling exercise, the exercise is never or should never be so long but that ample time may be given to its reproduction as a carefully written exercise. In oral spelling, the teacher may misunderstand the pupil; in written spelling, there is no possible chance for misunderstanding.

5. A good question should be carefully worded in order that there may be no ambiguity; it should be comprehensive, with a definite aim. A good answer should be a complete sentence, comprehensive, entirely answering all parts of the question, but still as short and concise as the question will admit.

6. A teacher should, in the goverment of a school, maintain that order which is necessary to the progress of her school. She should endeavor to instill into her scholars a love of order, honor, and, in order to do this, she must govern as far as possible by mild, yet firm means. No teacher can do this until she can command the full respect of her pupils.

7. The "self-reporting system" is, as a system, injurious to a school. In a school where there is a high sense of honor, it might be used, but even then, with an ambitious scholar, there may be a temptation to give a slightly incorrect report. With a majority of schools, there is not that keen sense of honor which will justify the self-reporting system. While some will in every case conscientiously report correctly, others will not, and thus injustice is done, and that, too, in no innocent way. We ought not thus to lead our scholars into temptation.

8. The objects of punishment are: 1. To preserve order by placing a penalty on all that tends to destroy order; 2. To discipline the scholar, that he may learn that most difficult of lessons—to govern himself.

9. The use of prizes as incentives to study depends upon the school. In a school where there is little disposition to study, little life, they are sometimes of advantage. As a general thing, however, the pupil studies more for the prize than the knowledge, and his education, instead of being a drawing out of his faculties, is really a cramming in, and at present we have, at any rate, too much cramming and not enough of real thought.

10. A teacher should endeavor to cultivate truth, honor, love of country, good laws, and of God. This is a work of patience, and how it can best be done is a hard question. The teacher must be thoroughly imbued with a love of all good things herself, and by "line upon line", "precept upon precept", as occasion may offer, strive to lead those who are committed to her care to be true to themselves, to their fellow men, and to their God.

EDITORIAL DEPARTMENT.

—— We have always noticed that when an educational journal begins its career by sweepingly condemning all other journals of its class as stupid, prosy, etc., it soon comes to the unqualified puffing of individual journals, often the least meritorious—especially those who have puffed it! It is amusing to notice how soon the one pat on the shoulder is followed by the other. We have also noticed that when a journal announces itself to be the only literary educational journal, the only educational journal that is read, the only educational newspaper, the only educational journal, etc., it takes ordinarily but a few issues to take some of this conceit out of it. There is no better eye-opener than the slow growth of a subscription list. It shows very clearly, though painfully, that every body is not of the same mind as the manager of the would-be model journal. We have also noticed that when a journal plays the role of stone throwing, it does not in the least enjoy the compliment of having any thrown back. We have in a few instances sent a well-aimed missile into the glass house of such a journal, merely for the fun of the thing, but the sad disturbance caused has always excited our compassion and pity. We have about come to the conclusion that it is cruel even to prick a pretension. There is usually one person that enjoys it, and is it kind or humane to disturb his happiness?

—— *The Chicago Teacher* for July agrees with us in the opinion that that journal is best edited that has the thorough article and the pointed, terse paragraph in due proportion. But it discounts the short paragraph somewhat by claiming that some of its paragraphs would fill a page in an ordinary educational monthly. We observe that the paragraphs of our sprightly contemporary are increasing in length, but we hope that it will not abandon short paragraphs altogether. We have made them a prominent feature of our journal for several years, but never thought of claiming and announcing it as a specialty. We were pleased when the new *Chicago Teacher* adopted the plan of our editorial department, and we sincerely hope that no change of its practice will cause it to take back the high compliment it paid our journal when it said, "It is the only one that has an editorial department worthy of the term editorial." We are sure that a little more experience will enable the promising editor to reproduce something of the spirit as well as the form of our editorial paragraphs! His journal improves encouragingly from month to month. The announcement in the July number that it retires "from the tread-on-the-tail-ov-me-coat-business", and that it can now "afford to be modest", is more than encouraging. Our admiration begins to rise to enthusiasm. But why did our contemporary judge that our June paragraph was aimed at it? We read the short paragraphs in more than one educational journal.

—— We copy this month a very spirited and pointed paper on the value of oral teaching in grammar schools, by Supt. Harrington, of New Bedford, Mass. If we understand the writer, he would not substitute oral teaching for text-book drills, but would make the former supplement and give vitality to the latter. One of the problems in American teaching is the complete union of oral and text-book instruction. The question of their comparative worth does not settle the value of the two methods when properly combined. One office of the oral lesson is to prepare the way for the intelligent study of the text-book. Our manuals in geography, history, grammar, etc., are dry skeletons of knowledge, if the living teacher does not breathe into them the breath of life. The most valuable instruction in these branches is dropped from the lips of the teacher. Such instruction is often like a bright light thrown over a dark path. But we suppose that the discussion has more special reference to the propriety of teaching the elements of the natural and physical sciences and other practical knowledge without any use of a text-book. It is generally agreed, we believe, that the elements of science should be taught largely through observation and by means of experiment and illustration; that the old text-book drills are nearly valueless in elementary schools. But mere oral lessons on these subjects are not enough. They must be made the pupil's possession by thorough and systematic reviews and drills. Until the pupil *reproduces* what he has been taught orally, there is little evidence that he is familiar with it. We have never attached much value to courses of formal lectures on science in grammar or even high schools, when they are not thoroughly reviewed in class drills. The lecture, like every other oral lesson, is but an introduction to the subject. It must be followed up by thorough class work. Much oral teaching now runs to waste because it is not systematized and fixed by drills.

—— We are satisfied that there is no elementary subject more neglected in our public schools than that department of orthography which relates to the sounds of the letters, their classification, written representation, etc. We believe that a majority of the pupils in our high schools do not know the difference between a vowel and a consonant; that they can not give even the name of the sound of *a* in wagon or in fall, or the number of sounds represented by *ch* or *th*. We have asked hundreds of applicants for a teacher's certificate to indicate, by the use of proper marks, the pronunciation of such words as *ocean*, *been*, *again*, *croquet*, etc., and not one in four has been able to do it. The great majority have not known what sounds compose these words, and few have been able to represent these sounds. How can such persons ascertain the pronunciation of an unusual word by consulting a dictionary, where the sounds are indicated by diacritical marks? This ignorance is not creditable to our schools. It is not enough that the pupils in the lower grades be taught to read or spell phonically. The pupils in the upper grades should be made familiar with the classification of the elementary sounds into vocals, subvocals, and aspirates (if preferred, the terms tonics, subtonics, and atonics may be used), and they should be drilled in the

proper utterance of these sounds, and, above all, they should be taught *to indicate them on paper.* This should receive attention not only in the grammar grades, but also in the high school. The mastery of a few words each week will be sufficient. The words may be spelled by letter in one column, pronounced (spelled phonically) in a second column, and defined in a third. The words should also be thoroughly analyzed orally. Pupils will thus not only master the elementary sounds, but they will learn the correct pronunciation of many words commonly or often mispronounced.

—— A LATE number of the *College Courant* contains a paper on "Higher Education and the State" by President I. W. Andrews, of Marietta College. Accepting the maxim in government, that whatever the people will do for themselves, the civil authorities should not attempt to do for them, he argues that it is not the duty of the state to establish and maintain colleges, medical schools, or law schools, but that these higher institutions, general and professional, should be left to be founded by private liberality, which is equal to the demand. The complaint that there are too many colleges, shows that the people are willing to provide all the requisite facilities for a higher education. The great increase in the donations to colleges within a few years, shows that they will be cared for by the friends of higher education. He also maintains that the state management of colleges is costly, and that the imposition of taxes for their support, being unnecessary, is unjust. The greater part of the work of higher education has been done by colleges established by private munificence, and why, it is asked, should the state sustain other institutions to do the work which they are doing with equal efficiency? This brief outline of the argument is sufficient to show that it strikes at the very root of the question. It must be conceded, we think, that, if private enterprise can be depended upon to establish and maintain all the colleges needed, it is not the duty of the state to support other colleges. What is the verdict of experience?

—— PROF. TAYLOR LEWIS, of Union College, asks, in a recent address, whether the general interest in the classics, and the more extensive reading of them by the mass of our educated men, have kept pace with the improvement of grammars and lexicons and text-books? He thinks there was much more classical enthusiasm fifty to one hundred years ago than now, and cites examples to show that classical taste then showed itself far more in Congress, on the bench, and in all our public bodies. He thinks that this decline is due to the fact that attention is now too much directed to the acquisition of a knowledge of the Greek language, simply as a *language*, rather than an acquaintance, wide or small, with the Greek *literature*. We make the means the end. Homer is studied in our colleges as a means of learning Greek, instead of Greek being learned as a means of reading Homer. The language is taught objectively, and we make accomplished Greekists, but few scholars read Greek

literature for its own pure sake. To make more of our classical training, he urges that we must aim at more extensive reading, and, secondly, the producing, in some way, of a state of thought and feeling which shall be a guarantee for classical study in after life.

—— THE few old fogies who still have lingering doubts respecting the feasibility of uniting mental and written arithmetic, are referred to the practice of the Badish schools, as described by Prof. Young in this number. "Mental arithmetic", he says, "is connected and keeps *even pace* with written, to which at every stage it is preparatory"—the true idea and the true practice. The making of mental arithmetic a separate branch of study, with separate text-books and recitations, is one of those American inventions which have had their day. The uniting of oral and written exercises in a part of the course, but not in all, will not answer. The union must be complete. Oral and written processes must go hand in hand *throughout the course.* The folly of postponing written arithmetic for terms to drill little children on the mental and logical analysis of problems, was long evident to thoughtful teachers. *The Chicago Teacher* says truly that "the analytical rigmarole which pupils are kept repeating, is fatal to rapidity, accuracy, and the reasoning power which it is intended to cultivate." The child not only learns these analyses by rote and goes through them mechanically, but he is thus actually unfitted to use common sense and originality in the solution of arithmetical problems. Mental analysis, not mere analytical verbiage, has an important place in arithmetic, and that place is in close connection with the principle, and the written process.

—— A WRITER in the *Maine Journal of Education* asks the question, "Are We Progressing?" and answers it with reference to the rural districts of Maine, omitting the cities and villages and other more thickly settled portions of the state. He states that the number of pupils enrolled in the schools annually is decreasing; that the expense per scholar is large comparatively; that there are fewer advanced scholars in the winter schools; and that, as a whole, the schools are not so forward as they were twenty years ago. He finds the chief cause of this decline in *the smallness of families*, and this is due, he thinks, to "dame fashion" and "also somewhat to the fatal spread of that knowledge which is poison to the interests of society." He urgently pleads for a reform, and hopes that the great evil which now threatens society, may be temporary, and "that our country schoolrooms, the very nurseries of our national strength, will again be crowded with bright, happy faces, and blooming youth, 'native to the manor born' of, that best of all, the old puritan stock." The smallness of New England families indicates either that the vigor of the puritan stock is exhausted, or that it has, in its wisdom, devised its own destruction. Here is a fact of grave interest, one that ought to receive earnest attention.

——The *Pennsylvania School Journal* for July contains three more papers on the management of teachers' institutes—by Messrs. Andrew Burtt, F. A. Allen, and G. S. Eberhardt. Mr. Burtt bears testimony against the "Literary Society" feature, the "Grand Entertainment" feature (including lyceum lectures, and the comedy done up by the funny men), and the "Displaying of the Lions." He gives a very sensible plan of conducting an institute, recommending that "at least one and not more than two good instructors be procured for general work." Mr. Allen gives his views somewhat in detail in the form of a letter to a county superintendent. "In one or two counties of the state", he says, "institutes have nearly died out by attempting to run them on what is called 'home talent'", and he adds that whatever may be urged in favor of the plan, "*practically* it does not work, nor can it be made to work successfully, save in special cases." Mr. Eberhardt thinks that institutes are "robbed of their efficiency and interest, and teachers most intolerably annoyed and bored" by devoting the time which should be given to good paid instructors, who are present, to the discussion of threadbare and indifferent subjects, the reading of crudely prepared and pointless essays, etc. The editor in commenting upon these papers, announces himself in favor of getting the best, whether this be "home talent" or talent from abroad—a sensible view. He misstates our position. We said nothing against relying on or employing home talent.

——There seems to be a very general disposition among teachers to regard every thing "theory", which lies outside of their own experience. If an institute instructor, for example, describes a method of teaching which his hearers have used or have seen used, his instruction is called "practical"; but if he gives a method which is new to his hearers, it is received as a "theory." We have heard methods whose practicability has been tested by hundreds of the most successful teachers, referred to as "fine-spun theories", and, of course, they were rejected as such. The cry of "theory" is the strong defense of old fogyism. It is often the first and last argument to which it resorts. It may be proper enough to call an ideal method, one that has not been tested, a theory, but when it has been successfully used, it is no longer ideal or theoretical. It is then a part of the practical experience of the profession. It is true that a method which may be successful in one school, may not, without modification, be successful in another, but this fact does not make the method a theory. The very best methods used in graded schools are often rejected by country teachers as impracticable, when all that is needed is their *adaptation* to the condition of ungraded schools.

——The examiners in one of the counties of Ohio, having been censured for being too severe in their examinations and requirements, published the "parsing" of ten applicants, five of whom received certificates. No names were given. The examiners will not find it necessary

to make any further defense. The applicants were requested to parse the words in italics in the stanza—

> "*Can storied* urn or animated bust,
> *Back to its* mansion call the *fleeting* breath?
> Can *Honor's* voice provoke the *sleeping* dust,
> *Or Flattery* soothe the dull cold ear of death?"

One applicant called "Can bust Back" a verb in the potential mode and present tense. Another parsed "can storied" together as a verb; "call" as an adjective, and "fleeting" as an adverb or a preposition.

—— A CORRESPONDENT wishes to know the experience of teachers respecting the advantage of pupils' using a lead pencil in their first lessons in writing. Which is the better, a lead pencil or a pen? Who will answer?——Another correspondent wishes to know our views respecting the propriety of offering prizes in teachers' institutes for the best reading, spelling, writing, etc. We see no special advantage in institute prizes, and should not offer them. We have, however, had no opportunity of observing the actual working of the practice. Who that has, will give the results?

METHODS OF CONDUCTING RECITATIONS.

We considered last month the advantages and defects of the several methods of calling on pupils to recite. We propose now to add a brief discussion of the merits of the two methods of testing the pupil's preparation—the *question* or *catechetic* method and the *topic* method. We freely use an editorial on this subject, which we published several years since.

I. THE CATECHETIC METHOD.

The chief merit of the question method is its *thoroughness*. When skillfully used, it may be made a most searching test of the pupil's knowledge. A very superficial knowledge of a subject will enable a pupil to talk on it or about it, but the answering of a few well directed questions is another matter. There is no ignorance which a question can not fathom and expose.

The question method permits a *systematic unfolding of the lesson*. The teacher has the order not only of the topics, but also of the facts of each under his control, and he can give due prominence to the more important. It is unnecessary to discuss the value of this advantage.

The question method also permits the imparting of much *incidental instruction*. The pupil may be indirectly led to new facts and views, and information of interest and value may be added by the teacher.

That the above advantages may be secured, it is necessary that the questions asked be *clear*, *concise*, and *definite*. An ambiguous or indefi-

nite question causes hesitancy, and justifies a loose and pointless answer. The character of the teacher's questions largely determines the character of the pupil's answers.

The teacher's questions should be so arranged that they may unfold the subject *logically* and *methodically*, bringing out clearly that which is important and fundamental. The order in which a lesson is unfolded, is a very important matter. The pupil's knowledge may thus be made clearer and more permanent, or it may be confused and muddled. In preparing himself to conduct a given recitation successfully, the teacher must keep these objects before him. His questions must be carefully studied; they must serve as searching tests, and, at the same time, as aids to the pupil in reducing his knowledge to a system—in separating principles from details.

All questions that suggest the answer or lead the pupil to it, technically called "leading questions", are worthless as tests, and should be carefully avoided. The same is true of questions that can be answered by "yes" or "no." The pupil is, indeed, more likely to answer such questions correctly than incorrectly, and this is true whatever may be his ignorance. The manner in which the question is asked, the suggestive look or "nudge" of a fellow pupil, or some other conscious or unconscious hint, may make correct guessing quite easy. It is scarcely necessary to remark that knowledge guessed out in this way is a very doubtful good—a very uncertain possession. Indeed, we look upon the practice of helping pupils through half-prepared lessons by leading questions and otherwise, as not only useless but pernicious. It deceives the pupil respecting his ignorance, and begets vicious habits of study. The requirements of the recitation must rigidly hold the pupil responsible for whatever knowledge is within his reach; and the fact that he has failed in his efforts to reach the same, must be disclosed before the needed assistance is given.

We are thus led to the fact that the thorough questioning of a class on a given subject requires thorough knowledge and careful preparation on the part of the teacher. His questions must bear the stamp of his own thinking—must be the coinage of his own brain, dropping from the mint bright and hot. "The asking of questions from the book" is exceedingly objectionable—what Gen. Garfield aptly calls the feeding of one's pupils on "cold victuals." The author's questions may be models in form and arrangement, but their slavish use in the recitation degrades the teacher to a mere machine, and his teaching to a mechanical and lifeless routine. The proper function of printed questions is to assist both teacher and pupil in preparing for the recitation—the former in modeling his own questions, and the latter in "proving" or testing his knowledge. A teacher must have sufficient command of good English and a sufficient acquaintance with the subject he teaches, to ask his own questions.

The chief defect of the method of conducting recitations by questions is its failure to cultivate sufficiently *the pupil's power of expression.* This defect may be overcome, in part, by requiring pupils to give full and complete answers. Most of the answers received in our schools consist of a single word, or of two or more words not forming a sentence. Cate-

chizing teachers, as a class, use more words in asking questions than their pupils do in giving their answers. Pupils should be required to answer questions in complete sentences.

A second defect of the question method is its failure to necessitate systematic thought and study in preparing the lesson. This defect is most marked in classes whose study consists in attaching ready-made answers to the printed questions found in their text-book, which is about as mechanical as the fitting of pegs to holes of different sizes. The real subject under consideration is wholly lost sight of. The studious pupil learns to fit a thousand answers to as many questions concerning his own country without catching one inspiring glimpse of the grand reality which unwittingly he has viewed piecemeal. It is true that the pupil may be driven into the recesses of the subject by questions that fly red-hot from the teacher's own brain, but such results are exceptional. The general fact is, that the method of reciting by questions fails to necessitate the classification and methodical arragement of knowledge by the pupil. It is not enough that the pupil acquire knowledge classified by others; the work of classifying must be done by himself.

II. The Topic Method.

What we have said respecting the weakness of the catechetic method will enable us to present in a clear light the advantages of the topic method. It cultivates *expression.* In reciting a topic the pupil is obliged to tell what he knows of it in successive sentences. He thus acquires a command of language, which it is impossible for him to gain in giving brief answers to specified questions.

It forces the pupil (if his recitations are not *memoriter*) to view the subject *as a whole;* to grasp its essential facts and principles, and arrange all that he has learned around them. This affords a fine mental drill, and the pupil who thus studies can not well fail to obtain a clear and thorough knowledge of his lessons.

But the topic method requires a clear-headed, thorough teacher to use it with success. In the hands of a superficial teacher it often degenerates into mere talking, the pupil failing entirely to state what is most essential to be known, and giving instead comparatively unimportant details. Such recitations are exceedingly deceptive. As a general rule, the topic method is better adapted to advanced than to primary pupils, and has a wider application in reviews than in advancing lessons. It can be used most successfully in teaching such branches as history and geography, but may be used in all branches, not even excepting spelling.

In our judgment the most efficient method of conducting recitations is to unite these two methods. The pupil'sl essons may be prepared, and, in the main, recited on the topic plan. His knowledge should, however, be frequently tested by searching questions. Whenever he discloses an imperfect understanding of the subject, the teacher should ply him with questions.

With advanced pupils the topic method may be so modified as to require the pupil to give a complete analysis of the topic before he attempts to fill up the outline with details. This is, indeed, worthy of being called a third method.

EDUCATIONAL INTELLIGENCE.

—— The trustees of the Cincinnati University have decided to open the institution September 15th. The corps of teachers will be provisional, and the permanent faculty to be announced as soon as practicable.

—— The Legislature of Texas has passed a law over the Governor's veto, which seriously cripples the new school system. A large number of schools had been organized, and 127,000 children were instructed last year. We hope that a wiser legislature may soon correct this great mistake.

—— President White, of Cornell University, offered the college crew the best boat that can be built, on condition that the use of liquor and all betting be forsworn in their annual regatta, and the students enthusiastically accepted the offer.

—— The Supreme Court of Ohio has decided, all the judges concurring, that boards of education have the right to allow or forbid the reading of the Bible and the imparting of religious instruction in the public schools. This leaves the question, just where it has always been left in this state, *with the people.* The decision of the Superior Court of Cincinnati was reversed.

—— Indiana is conducting four State Normal Institutes this summer. The one at Vincennes, opening July 28th for three weeks, is under the supervision of D. Eckley Hunter, of Princeton, Ind., who is assisted by Prof. S. S. Hamill, of Illinois, Miss L. D. Hampton, Louisville, Ky., Hiram Hadley, Chicago, and Messrs. Gow, Bell, Jones, McRae, Hough, and others, of Indiana. Tuition, $3.00.

—— Prof. A. J. Tomlinson, of Bush Hill, North Carolina, opened a normal school of four weeks in Asheboro, Randolph county, July 22d. It is conducted under the auspices of the county board of education, with free tuition. We are very glad to see the South employing this efficient agency, the normal institute, for the improvement of its schools.

—— Mr. William Slocomb died at his home in Rochester, N. Y., May 9th, 1873, in the 91st year of his age. He taught school for more than fifty years, most of the time in Marietta, Ohio, and vicinity, and his lively interest in the work continued through his long life. The readers of the Ohio Educational Monthly in 1868 will remember his excellent paper on school government. "Slocomb Hall", Marietta College, attests his interest in liberal education.

—— S. S. Hamill, for the past five years professor of elocution and English literature in the Illinois Wesleyan University, has accepted the chair of elocution and belles-lettres in the North Missouri State Normal School, Kirksville, Mo., at a largely increased salary.——Geo. T. McCord and S. A. Will, both of Allegheny City, take charge of the "Curry Institute", Pittsburgh, at the opening of the next school year. They are both live and progressive teachers.

——Rev. A. A. E. Taylor, D.D., of Cincinnati, succeeds Dr. Willis Lord, resigned, as president of the University of Wooster; and Mr. A. D. Hepburn has resigned the presidency of Miami University. The trustees of Otterbein University have increased the salaries of the professors $200 a year each.——Miss Rebecca S. Rice, a former teacher in Antioch College, who has been studying in the University of Heidelberg, Germany, for more than two years, has returned to Yellow Springs, and accepted the profesorship that was awaiting her.

——Mrs. N. A. Stone has resigned the principalship of the Akron High School to spend some two years in Europe—a rest and tour which she has richly earned. She is to be succeeded at Akron by Miss M. Parsons, for several years past in charge of the high school of Mansfield. Miss P. is to receive a salary of $1,400.——T. N. Wells, for several years in charge of the schools of Lebanon, Ohio, has accepted the superintendency of the public schools of Paducah, Ky., at a salary of $2,000. Miss A. M. Hicks, a graduate of the Oswego Normal School, N. Y., takes the principalship of the high school; salary, $1,000.

——Ex-President Henry L. Hitchcock, of Western Reserve College, died at his home, July 6th, 1873, in the 60th year of his age. He accepted the presidency of the college in 1855, when it was overwhelmed with debt, abandoned by nearly all its former faculty, and largely deserted by its students. By his wise and untiring efforts, the college was freed from debt, its buildings and grounds improved, its endowment fund largely increased, and its former high standing restored. When he resigned in 1872, on account of ill health, Western Reserve was the best endowed college in Ohio. His memory will long be cherished by the friends of sound learning.

—— The steamship Victoria sailed from New York for Glasgow, June 21st, with over one hundred and fifty teachers, a majority being ladies. They represent nearly every state in the Union. The party is under the direction of Cook & Sons, the famous excursion managers. It is stated that the party had a public reception at Edinburg, a "railway welcome" at Derby, and a reception by the Earl and Countess of Shrewsbury, at Alton Towers. It is expected that there will be a ball, in their honor, at London, and possibly an audience with the Queen. The American teachers are evidently receiving much merited attention abroad. The New York *Advertiser* paid the members of the party a high compliment for the good sense displayed in their outfit. As the steamer moved down the bay, a person on the dock exclaimed, "There go brains!" The party will visit the Vienna Exposition, returning the latter part of August.

——Supt. Ormsby, of Xenia, has invented a Map Drawing Scale, which we believe to be the best aid to map drawing that has ever been made. It is a simple combination of a scale of inches, a scale of latitude, and ten scales of longitude, each based on the same unit of measure—the inch. The scales of longitude are to be used in determining the dis-

tances between meridians on different parallels of latitude. These scales are stamped on a light and neat ruler, admirably adapted to school use. The scale is accompanied with a "Guide to Map Drawing", which clearly explains its use. Mr. Ormsby has been working for years to produce a practical aid to map drawing by means of latitude and longitude—the only true and accurate system. He has at last happily succeeded, and we do not see that any better instrument can be invented. The price of the scale, with guide, is 25 cents; blackboard scale, $4.00 per dozen. Address George S. Ormsby, Xenia, Ohio.

—— In an intelligent review of the work of the Cleveland schools the past year, the *Leader* refers to the scheme of German instruction, inaugurated some three years ago, as the most efficient system in the United States. Four thousand pupils were instructed in German the past year, about one-third of the number being American children. The German is taught in separate recitation rooms by teachers who make this a specialty. The engagement of Mr. Frank Aborn is referred to as marking "a new era in the teaching of drawing in the western schools", because it introduces "the practical method of the art school of South Kensington, Great Britain". The success of the first year's instruction has exceeded all expectation. The progress made in penmanmanship and music has been very satisfactory. The disposition of the teachers to abandon corporal punishment has resulted in a very great reduction in the number of cases of its use. The experiment of employing female principals "is felt by all concerned in the management of the schools to be an eminent success."

—— The policy of employing female principals was freely canvassed in Dayton, Ohio, prior to the last annual election of members of the board of education, and in several of the wards men were elected who were opposed to the "innovation." At a late meeting of the board the subject was fully discussed, and male principals were elected in a majority of the districts. The salaries of principals, whether male or female, was fixed at $1,500, which gives Miss Westfall and Miss Wilson, the two lady principals retained, an increase of $500. It seems to us to be the true policy in cities to fix the salaries of principals high enough to secure the services of a competent man, and then, if a lady fills the position with equal success, let her have an equal salary. It is *service* in these positions, not sex, that should be paid for.

—— The joint meeting of the Ohio and Michigan Associations at Put-in Bay was a very pleasant and enjoyable occasion. The whole number present was nearly five hundred, about one-fourth of whom were from Michigan—a fine delegation. The weather was cool and refreshing, but a little "squally", which somewhat interfered with yachting and boating. The published programme was carried out without a break, except in the discussions, for which there was little time. The only papers discussed were Mr. Venable's on the teaching of natural sciences, Prof. Putnam's on "The Common School Historically", and Mr. Michell's on

a proper course of instruction and practice for teachers. The last two papers were discussed very briefly. It must be conceded, we think, that the Michigan teachers bore off the palm of excellence. Pres't Angell's address was a masterly production, clear and forcible in argument, beautiful, even exquisite, in illustration, and elegant and impressive in delivery. It lifted culture out of the dirt, and showed forth its glory in the brilliant light of its own literature. The papers of Profs. Putnam and Strong were scholarly and able. The Ohio papers, with perhaps two exceptions, were not equal in literary merit to those presented at former meetings. As an offset to this, they were eminently practical. Prof. Morse's address was heartily enjoyed and applauded by all who heard it. The proceedings of the Ohio Superintendents' Association were worthy of that body. The proceedings of the two meetings, with the addresses and papers and phonographic reports of the discussions, will be published in our September number—making, probably, more than a double number in size and cost.

Ohio Central Normal School.—The first commencement of this institution was held Thursday evening, June 19th. The members of the graduating class, consisting of eight young ladies and gentlemen, acquitted themselves with great credit, their discussions of the different questions connected with their professional life being modest, progressive, and intelligent. At the close of the exercises, Hon. T. W. Harvey, State Commissioner of Common Schools, being called out, addressed the class and the large audience present. We give the substance of his remarks as reported in the *Ohio State Journal:*

"He said that he would not have left a desk covered with important work, had he not felt more than a passing interest in this, the first graduating class of the 'Ohio Central Normal School.' Too many so-called normal schools were, in reality, mere academies and colleges with normal departments attached. These were doing a work well enough in itself, perhaps, but they never could meet the demands of the profession, either as to numbers or efficiency. They were subordinate to the academy or college, and hence could never answer the ends of a true normal school. He rejoiced that at last we had here, in Central Ohio, a school for the training of teachers, founded upon what he regarded the true principle,—one recognizing the fact in practice, as well as theory, of the existence of a purely professional science, and that all collateral sciences must be subordinated to this, in the teacher's professional preparation. He would congratulate the class and the founders of this institution upon so auspicious a beginning—a beginning that must tell favorably, not only upon the future school, but upon the profession at large.

"Then turning to the audience, he gave such a clear and eloquent exposition of these principles, and the results to the profession and the state, likely to ensue upon their general recognition, as only the true educator, whose large experience and earnest labors have contributed so materially to the prosperity of our educational system, could give. He expressed it as his opinion, that this school ought to lead, and perhaps would lead, ere long, all in the county, both in point of numbers and in the exposition of the true principles of a normal school."

Capt. Mitchell has sold his interest in the institution to Mr. M. H. Lewis, of Sandusky, and will retire at the close of the present normal institute. Mr. Lewis will bring to the school large experience and tried ability, both as a teacher and as a business man, and the good work, so well begun, will be carried forward to a successful issue.

Ohio Agricultural and Mechanical College.—The trustees announce that this institution will be opened for students Sept. 17th, 1873, with excellently equipped laboratories in chemistry and physics, and

with well selected cabinets in mineralogy, geology and zoölogy. Two courses of study will be established at the opening of the college—an agricultural course and a scientific course, the former to extend through three years, and the latter four years. Candidates for admission to the agricultural course must sustain an examination in the common branches and in algebra to quadratic equations. Candidates for admission to the scientific course must pass an examination in the common branches, elementary physics, chemistry and botany, in physical geography, algebra to the general theory of equations, and plane geometry. Provision will be made for instruction in the languages and other branches. It is intended to make the scientific course a prominent and characteristic feature of the institution. The tuition is fixed at $8.00 a term, or $24.00 a year.

MIAMI UNIVERSITY.—The trustees of this institution have voted to suspend instruction, and to grant the free use of the buildings and grounds to Professors Bishop, McFarland, and Osborn, for such a course of instruction as may be agreed upon. It is expected that they will establish a preparatory school for other colleges, and a school for mining, engineering, and metallurgy. If they do not use the property, it may be leased to other parties. The fixed income of the university ($5,600 a year) is to be used to pay the present indebtedness, and, when this is done, it is to be properly invested, with a view of reorganizing the university as soon as an endowment of $50,000 is secured. A committee of five trustees was appointed to act in conjunction with the Alumni Committee to petition the Legislature of Ohio (and Congress, if necessary,) to place the university in the hands of its alumni, as corporate members to control the institution. As the control of the state has brought this noble institution into its present embarrassment, it is hoped that private enterprise may have a chance to restore it to prosperity and usefulness.

BOOK NOTICES.

A LATIN GRAMMAR FOR SCHOOLS AND COLLEGES. Founded on Comparative Grammar. By JOSEPH H. ALLEN and JAMES B. GREENOUGH. Boston: Ginn Brothers.

Classical teachers have long felt the need, growing year by year more imperative, of a good Latin grammar for school use. The researches of many an eminent scholar in comparative grammar have, within a few years, thrown a flood of light upon the idiomatic grammar of all the Indo-European languages. The best result of their labors have, so far as Greek is concerned, already been put into the hands of American teachers and students in the school grammars of Hadley, Goodwin, Curtius, and others, and we have waited a long time for some competent hand to do the same work for Latin. Many more or less successful attempts have been made, within the last ten years, to meet the recognized want. Prominent among them was the "Manual of Latin Grammar" of Allen, a scholarly and original outline of the subject, very valuable in its way,

but professedly an outline merely, too meager for the advanced student, and perhaps rather abstract for the beginner. It is this outline plan which the present work in the main follows, filling up and completing what was there only sketched. Its authors have been very fortunate in condensing into reasonable compass a clear and broad view of the present state of the subject, including some of the most recent investigations. They have, wisely as we think, adhered in the main to the old arbitrary divisions of nouns and verbs, handed down originally from the Romans themselves, instead of the more scientific classification by stems. The difficulties which lie in the way of the latter method of classification are too formidable to be heaped in the path which the learner is apt to find rugged and tedious at best. At the same time they have very clearly explained the new classification, so that the advanced student, or the teacher who prefers to adopt it, will find the materials ready at hand. The treatment of the subjunctive—that crucial test of the Latin grammar—is in many particulars original, and in general more simple and natural, than in most previous works. The scope of the work is more comprehensive than that of any American grammar with which we are acquainted, while its arrangement makes it particularly convenient of reference. For pupils in the higher classes of high schools and academies, and for college students, it seems admirably adapted. Whether it would answer so well for young beginners, we might doubt. Upon the whole the practical teacher will find it one of the most valuable of recent additions to his "tool-chest." G. F. M.

LATIN LESSONS: Adapted to the Manual Latin Grammar. Prepared by WILLIAM F. ALLEN, A.M., Professor of Ancient Languages and History in the University of Wisconsin, and JOSEPH H. ALLEN. Boston: Edwin Ginn.

LATIN LESSONS: Adapted to Allen and Greenough's Latin Grammar. Prepared by R. F. LEIGHTON, Master of the Melrose High School. Boston: Ginn Brothers.

These two books cover pretty much the same ground. Both are intended to lead the beginner from the very beginning to a point where he can profitably take up some classic author. And the plan of the two works is not essentially different. The first is somewhat the more compact; indeed, compared with most works of the kind, seems very brief, yet, if thoroughly mastered, it undoubtedly contains all that the student needs for his introduction to any of the simpler authors. It is specially well fitted to precede the study of Cæsar, from the fact that all the sentences and examples used are selected from the earlier chapters of the Gallic War, and the second part contains some thirty chapters of that work, carefully annotated for the use of young scholars. The perplexing subject of the *Oratio obliqua* seems to be treated with unusual care and clearness. The exercises to be translated into Latin also show signs of careful and intelligent preparation, and, if properly taught, would do much to lessen the difficulties of the scholar's introduction to more extended manuals of prose composition. Mr. Leighton's book is larger, and correspondingly fuller. The reading lessons are selected principally

from modern Latin,—"owing to the almost absolute lack in classic authors of matter at once simple in style, and suitable for elementary practice." Possibly the exercises for translation into Latin would be found rather difficult for younger scholars; they are certainly very thorough. G. H. M.

PRANG'S NATURAL HISTORY SERIES. For Schools and Families. Arranged for Instruction with Object Lessons. By N. A. CALKINS, Author of "Primary Object Lessons." Boston: L. Prang & Co.

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NEW BOOKS RECEIVED.

PHYSICAL GEOGRAPHY. By Arnold Guyot, Author of "Earth and Man." New York: Scribner, Armstrong & Co.

A BRIEF HISTORY OF TEXAS. For Schools. By D. W. C. Baker. New York and Chicago: A. S. Barnes & Co. 1874. Price, $1.25.

TRUE SUCCESS IN LIFE. By Ray Palmer. New York and Chicago; A. S. Barnes & Co. 1873. Price, $1.25.

FOURTEEN WEEKS IN CHEMISTRY. Revised Edition, By J. Dorman Steele, Ph.D. New York and Chicago: A. S. Barnes & Co. 1873. Price, $1.50.

LATIN PRONUNCIATION. By Walter Blair, M.A. New York and Chicago: A. S. Barnes & Co. 1863. Price, $1.00.

AHN'S GERMAN READING CHARTS. Hand-Book. 1873.
AHN'S FIRST GERMAN BOOK. 1873.
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AHN'S RUDIMENTS OF THE GERMAN LANGUAGE. 1873.
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—By P. Henn. New York: E. Steiger.

BARTHOLOMEW'S LATIN GRAMMAR. By S. K. Bartholomew, A.M. Cincinnati & New York: Wilson, Hinkle & Co. $1.50.

RECREATION: THE SCHOOL STAGE.—Messrs. Wilson, Hinkle & Co., (Cincinnati and New York,) have just published *Venable's School Stage*, a collection of Juvenile Acting Plays, for school and home, Sent by mail postpaid on receipt of price, $1.25. A fuller announcement will appear in the next number of this journal.

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Histories—Elementary, 75 cts.; Illustrated School, $1.75.

Language—Primary Grammar, 50 cts.; English Grammar, 90 cts.; Rhetoric, $1.50; First Lessons in Composition, 90 cts.

Botany—First Book, $1.00; Advanced, $1.50; Charts, $15.00.

German—Grammar, $1.50; Primer, 40 cts.; Reader, 50 cts

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THE

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OHIO AND MICHIGAN TEACHERS' ASSOCIATIONS.

PROCEEDINGS OF A JOINT MEETING, HELD AT PUT-IN BAY, JULY 2D AND 3D, 1873.

The Ohio Association was called to order at 9¼ o'clock, Wednesday morning, July 2d, by George S. Ormsby, of Xenia, the retiring President of the Association.

Prayer was offered by Pres. H. A. Thompson, of Otterbein University, Westerville, Ohio.

I. M. Clemens, of Wooster, was chosen assistant recording secretary; W. D. Gibson, of Cincinnati, was chosen assistant treasurer; L. L. Campbell, of Niles, was chosen assistant railroad secretary.

On motion of Pres. E. T. Tappan, of Kenyon College, Gambier, all the teachers from the Michigan Teachers' Association were admitted as honorary members of this Association.

On motion of Capt. Wm. Mitchell, of Worthington, the same courtesy was extended to teachers from other states.

On motion of G. A. Carnahan, of Cincinnati, chairman of the Executive Committee, W. W. Ross, of Fremont, F. M. Ginn, of Clyde, and L. A. Knight, of Cincinnati, were appointed a committee of communication between teachers and those wishing to employ teachers.

An address of welcome, by U. T. Curran, President of the Ohio Teachers' Association, was made to the teachers of the Michigan Teachers' Association. A response immediately fol-

lowed by J. B. Angell, President of the Michigan University, and also President of the Michigan Teachers' Association.

Pres. U. T. Curran, of Sandusky, delivered his Inaugural Address.

In the absence of W. H. Venable, of Cincinnati, his paper on "*Methods of Instruction in the Natural Sciences in Public Schools*", was read by G. A. Carnahan, of Cincinnati.

The discussion of this paper was opened by C. L. Hotze, of Cleveland, and continued by S. G. Williams, of Cleveland, Pres. E. T. Tappan, of Gambier, M. C. Stevens, of Salem, Prof. E. A. Strong, of Grand Rapids, Mich., John Hancock, of Cincinnati, Prof. S. M. B. Sill, of Detroit, Mich., F. Giauque, of Glendale, Dr. O. N. Hartshorn, of Mt. Union, and S. D. Barr, of Cleveland.

Adjourned till 2½ o'clock, P.M.

Afternoon Session.

On motion of C. F. R. Bellows, of Ypsilanti, Mich., B. E. Nichols, of Ann Arbor, was appointed an assistant secretary from Michigan.

Pres. U. T. Curran introduced J. B. Angell, President of the Michigan University, Ann Arbor, who delivered an address on "*The Philosophic Study of Literature.*"

The discussion of the address was opened and closed by Prof. Joseph Estabrook, of Ypsilanti.

Prof. Arthur Forbriger, of Cincinnati, read a paper upon, and gave a practical illustration of, his method of "*Drawing in the Public Schools.*"

The discussion of this exercise was opened by Jno. Hancock, of Cincinnati, and continued by A. J. Rickoff, of Cleveland.

On motion of A. J. Rickoff, of Cleveland, the Association decided, when it adjourned, to meet at 8 o'clock, P.M. for the purpose of witnessing an exercise in drawing by Prof. H. B. Putnam, of Boston.

On motion of Geo. S. Ormsby, of Xenia, Geo. S. Ormsby, L. S. Thompson, of Sandusky, D. F. DeWolf, of Toledo, J. C. Barney, of Warren, J. F. Lukens, of Portsmouth, A. T. Wiles, of Zanesville, Jno. McBurney, of Cambridge, G. N. Carruthers, of Elyria, and M. S. Turrill, of Cincinnati, were appointed a committee on nomination of officers.

A motion by Geo. S. Ormsby, to reconsider the motion to ad-

journ to 8 o'clock P.M., was discussed by W. D. Henkle, of Salem, and A. J. Rickoff, of Cleveland, and lost.

On motion of Jno. Hancock, of Cincinnati, the Association adjourned.

Evening Session.[1]

The Association met promptly at 8 o'clock.

Prof. H. B. Putnam, of Boston, gave a short history of the introduction of drawing into the public schools of Massachusetts, and the methods of teaching it in Boston. Questions were asked by A. J. Rickoff, L. S. Thompson, Henry H. Fick, of Cincinnati, Arthur Forbriger, and Prof. D. Putnam, of Michigan State Normal School.

Thursday, July 4—Morning Session.

At 8¼ o'clock the Association was called to order by John Hancock, of Cincinnati, for the purpose of listening to a continuation of the remarks of H. B. Putnam, of Boston, on drawing. Questions and remarks were made by D. F. DeWolf, of Toledo, and Prof. John Goodison, of Ypsilanti, Mich.

On motion of G. A. Carnahan, of Cincinnati, the following committee of nine was appointed by the President to secure a place of meeting for next year: Jno. Hancock, of Cincinnati, D. F. DeWolf, of Toledo, A. J. Rickoff, of Cleveland, R. McMillen, of Youngstown, J. M. Goodspeed, of Athens, W. Watkins, of Dayton, R. W. Stevenson, of Columbus, A. T. Wiles, of Zanesville, and W. D. Henkle, of Salem.

On motion of G. A. Carnahan, W. S. Wood, of Findlay, M. C. Stevens, of Salem, and M. H. Lewis, of Sandusky, were appointed a committee on resolutions.

W. D. Henkle, of Salem, moved that the Constitution be amended as follows: The Association shall have power to establish one or more sections, and provide for their organization.

The amendment was discussed briefly by Dr. O. N. Hartshorn, of Mt. Union, Geo. S. Ormsby, of Xenia, H. A. Farwell, of Norwalk, and then laid on the table.

Pres. J. B. Angell, of Michigan University, took the chair, and introduded Prof. D. Putnam, of Michigan State Normal School, who read a paper upon "*The Common School Historically.*"

The discussion of this paper was opened by Prof. E. Olney, of Michigan University, and continued by Prof. J. B. Thompson, of New York.

Pres. Curran introduced Prof. E. S. Morse, of Salem, Mass., who delivered the Annual Address of the Association.

The Association adjourned to meet at 1¾ o'clock P.M.

Afternoon Session.

At 2 o'clock, H. B. Putnam continued his remarks on drawing.

William Mitchell, of Worthington, read a paper on "*What shall constitute a Proper Course of Instruction and Practice for Teachers.*"

In the absence of Miss Delia A. Lathrop, of Cincinnati, who was expected to open the discussion on this paper, the discussion was opened by Jno. Hancock, of Cincinnati, and continued by Prof. D. Putnam, of Michigan State Normal School, C. F. R. Bellows, of Michigan State Normal School, and Pres. O. N. Hartshorn, of Mt. Union.

Prof. Felix Heikel, of Helsingfors, Finland, was introduced to the audience, and made some very pleasing remarks.

Prof. E. S. Morse, of Salem, Mass., gave a talk on an insect belonging to the genus *Ephemera*, known along the Lake as the "June Fly."

Pres. Angell introduced Prof. E. A. Strong, of Grand Rapids, Mich., who read a paper on "*Preparation for the High School.*"

The discussion of this paper was opened by Duane Doty, of Detroit, Mich., and continued by E. H. Cook, of Columbus.

The committee on Nominations reported as follows:

President—D. F. DeWolf, of Toledo.

Vice Presidents—Wm. S. Wood, of Findlay, Maria Parsons, of Akron, M. R. Andrews, of Steubenville, J. C. Harper, of Newark, and F. M. Ginn, of Clyde.

Recording Secretary—I. M. Clemens, of Wooster.

Corresponding Secretary—L. W. Day, of Cleveland.

Treasurer—L. S. Thompson, of Sandusky.

Auditor—J. S. Wilson, of Gallipolis.

Executive Committee—For three years: A. B. Johnson, of Avondale, and Samuel Findley, of Akron. For two years: John Ogden, of Worthington, and H. B. Furness, of Tiffin. For one year: T. C. Mendenhall, of Columbus, and G. A. Carnahan, of Cincinnati.

Finance Committee—W. H. Dressler, of Alliance, J. H. Loomis, of Napoleon, G. W. Welsh, of Lancaster, H. A. Farwell of Norwalk, and W. S. Eversole, of Marion.

The report was adopted.

The committee on place of meeting reported in favor of meeting at Put-in Bay next year.

The report was adopted.

The committee on resolutions reported as follows:

1. *Resolved*, That the Ohio State Teachers' Association would take this opportunity of expressing its gratification with the happy results of this its second meeting at Put-in Bay, with the numerous attendance of teachers, with the high and interesting character of the exercises, and with the growing interest in the cause of education which has here been manifested.

2. *Resolved*, That the thanks of the Ohio Teachers' Association are due and are hereby tendered to the teachers of Michigan for their generous contribution to the interest of this meeting, by their presence, and especially by the excellent papers and addresses which it has been our pleasure to hear; that we recognize in them fellow workers in a common cause which knows no state lines and no diversity of interests; that while we have felt the inspiration of their words and the earnest spirit that moves them, we shall be glad to welcome them again to our gatherings and unite with them in the discussion of the questions connected with our noble profession.

3. *Resolved*, That the thanks of the Association are hereby tendered to Prof. Putnam, of Boston, for his interesting account of the work done in the schools of Massachusetts in drawing, and especially to Prof. Morse for his inimitable and most excellent address.

4. *Resolved*, That we tender thanks to the gentlemanly proprietors of the Put-in Bay House and of the Beebe House for their hospitality in entertaining the members of the Association at reduced rates, and to the Railway and Steamboat lines that have granted reduction of fare, and to Mr. W. E. Hamilton, of the steamer Sarah Van Epps, for special favors.

The report was adopted.

On motion of Samuel Findley, of Akron, the teachers of Michigan were invited to meet with us next year.

On motion of D. F. DeWolf, of Toledo, the teachers of Indiana were also invited to meet with us next year.

W. D. Henkle, of Salem, called up his resolution concerning the constitutional amendment. The resolution was discussed by T. C. Mendenhall, of Columbus, Jno. Hancock, of Cincinnati, and Wm. Mitchell, of Worthington, and adopted by the Association.

On motion of W. D. Henkle, the Executive Committee of the Ohio Teachers' Association was empowered to act in the formation of sections, with the Executive Committee of the Ohio Superintendents' Association.

After singing the Doxology, the Association adjourned.

L. S. THOMPSON,
Recording Secretary.

OPENING ADDRESSES.

ADDRESS OF WELCOME BY PRESIDENT U. T. CURRAN.

Ladies and Gentlemen of the Ohio Teachers' Association:

I am happy that it is my first duty as presiding officer of your Association, to receive in words our fellow teachers of Michigan. The same people who have covered the hills and valleys of Ohio with the products and supplies of industry, have caused the plains of Michigan to smile with harvests, and have made her pine forests into homes for her people; and they who have the welfare of both commonwealths at heart, have dotted the land with school houses, and their cities have erected palaces for the queen of thought, and popular education has contributed her power until the sound of her voice is heard in every hamlet. Ladies and Gentlemen of the Michigan Teachers' Association, in the name of the Ohio Teachers' Association, I extend to you the hand of welcome in the person of your President, whom I now have the pleasure of introducing.

RESPONSE BY J. B. ANGELL, PRESIDENT OF MICHIGAN TEACHERS' ASSOCIATION.

Mr. President: It gives me great pleasure, in behalf of the Association which I have the honor to represent, to return our most hearty thanks to you, Sir, and to your brethren for the cordial invitation to join you in this meeting, and for the even more cordial reception which we found awaiting us upon our arrival. I think I have heard that there were in old days something like strife and jealousy between these two sister states, on the question of boundary, but I suppose that I risk nothing in saying that to-day there remains no strife, and there is no rivalry between us save that of noble emulation to do the very best we both can in that enterprise which has brought us here. There is, Sir, no disputed state line, and no other dispute between Michigan and Ohio, in this grand work, to which we have devoted our lives. (Applause.) I receive, Sir, in the spirit in which you have given it to me, the right hand of welcome and friendship, and henceforth the teachers of these states will walk on hand in hand, and shoulder to shoulder, in this same common conflict, for the same common victory over our common foes, ignorance

and, I trust I may say, pedantry, and wrong of every sort. If I, Sir, may be allowed a single word that seems personal in its bearing, as a native of Rhode Island, in whose veins the blood of two hundred years of Rhode Island life is coursing, I trust I can say, without impropriety, that I can not stand upon this shore in the sight of these waters, on which that bravest of all the brave sons of Rhode Island, Oliver Hazard Perry, won his brilliant and decisive victory, in our late, and I trust I may say last war with Great Britain, and I believe no Ohio man can stand here to-day, without being filled with patriotic pride, without having a new joy added to the other joys which belong to this festival, by those hallowed memories that cluster around this spot upon which we stand. (Applause.) I want to say, Sir, again, in behalf of my friends, that we thank you most heartily that the high privilege is given us of meeting here with you on this delightful spot, to share with you in the social and intellectual pleasures which this meeting brings, and to rejoice with you in the prosperity of your vigorous Association, whose meeting is now to be so happily inaugurated by you as its President.

INAUGURAL ADDRESS.

BY PRESIDENT U. T. CURRAN, SANDUSKY, OHIO.

Ladies and Gentlemen of the Ohio Teachers' Association:

We are met to consider a part of those mighty influences which are rapidly causing such great changes in the condition of the human race. Truth has at length found a fair field, and is marshaling her host in the great contest. Our post is one of honor. We are in the center of the column, and to us is confided the ensign. But we must not esteem ourselves over much; great as is our influence, it must not be overrated. We are apt to attribute all of our national prosperity to one source—the common school. There are other factors in the makeup of the American character, to which we must give due weight.

The removal of artificial bars to individual advancement, such as the abrogation of the laws of primogeniture, the inability to devise property by entail, the prohibition of privileged classes, the freedom of the press, of speech, of thought, have exercised very great influence. In a word, individual enterprise has been left free; standing in social circles is emphatically at the command of individual exertion. The common school has placed a means of success in the hands of all; the constitution of society has opened the way, and the natural activity of the human race, unhindered in its action, and stimulated by the extraordinary facilities of acquiring wealth and position, afforded by the building up of society from its elements, has done more than the common school. The average amount of knowledge and mental drill, acquired at our schools as generally conducted, is very small. A boy placed in a business house with

the bare elements of an education becomes a keen observer and a man of cool judgment: because he has pored over books, and committed to memory the "thirty-nine articles" of Murray's grammar? By no manner of means; but because he has been brought into contact with *living realities*, and has been forced to recognize the relations and inter-dependence of things which exist in his business. But by common consent we have attached the chief importance to our schools as the foundation stone of the safety of the state. Our common-school education is good, but a home education which gives to the world an honest man, is better. The state rests more safely in the hands of men of stern integrity than in the care of the cultured and refined alone.

The institution most surely affecting the interests of humanity, is the family. As a rule, the parent desires the best interests of his children, and may be safely left to take care of them. In fact, men have not delegated to society at large the home government of their children. That is one of the reserved rights, and is not interfered with, unless that management should violate the laws in a very marked manner. In all ages men have retained this right, and the attempt to interfere, as in the case of Sparta, produced an abnormal state of society, which was destructive to its best interests—the dangerous classes of youth, who are not restrained at home. No one will suggest that the state has a right to dictate the moral culture to begin at home. Yet here is the root of all the evil. Shall the law presume that the parents will not educate their children? But parents do educate their children. If a compulsory law would permit a Catholic or a Protestant to educate his children at a parochial school, would it step in to say when the process was complete? The desire for a compulsory law has partly grown out of a belief that the knowledge of the schools prevents crime; somewhat, I admit, but the habit of submitting to restraint, more. Laws do not make men good; they can not be converted by legal enactment; law restrains and punishes but is not reformatory. Our penitentiaries are not reform schools, nor is the gallows. Those who attempt to regulate society by legal measures have met with signal failure—witness the temperance reform. The root of the evil is not there. You may, it is true, clip off the ends of the branches, but the root remains unharmed. Americans can not be charged with a neglect to educate their children. Many foreigners are of an extremely ignorant class; their greed for money, as well as an inappreciation of the benefits of instruction, causes them to neglect the education of their children. Time will cure this. Perhaps a well considered and carefully guarded compulsory law might assist in remedying the evil. Let us examine carefully the working of such laws in our sister states before we commit ourselves to the measure. Truancy from school in our cities is one of the great evils. Truancy at once causes the boy to place himself in complete sympathy with the criminal classes. Truants are outlaws, and skulk around the haunts of vice. We need a law making truancy a misdemeanor cognizable by our courts. Loitering during school hours should be classed in the same list. Those children who are placed at work very early, lose, it is true, the advan-

tage of education, but they acquire habits of industry which will go far to keep them from crime and vice.

THE GERMAN DIFFICULTY.

The immigration of so many persons speaking the German language occasions a difficulty in all our large towns. The matter is of sufficient importance to merit your attention for a few minutes. The English and the German are branches of the same great language. The Germans are off the great thoroughfare of travel to and from the East; they have not been a great commercial people, and have not been overrun by foreign armies but on few occasions, and have always managed to throw off their aggressors before the current of their speech became contaminated. They are indigenous to their own country; their social customs and modes of thought are almost purely the spontaneous outgrowth of the people themselves. The German language presents a fit expression of the thought of the people. It is somewhat cumbrous, unyielding to outside pressure, building up within itself, forcing people to represent to their minds the new evolutions of thought by means of familiar sounds and keeping prominently before the mind the elements of the idea.

The English language, on the other hand, was transplanted in a foreign country, spoken by a band of adventurous men, who had burst away from the endearments of home and the memories of their fatherland. Brought under the yoke, they came in contact with the softening influence of other tongues. Their home became the great center of exchange of the world; men of all nations sought it, and its sons sought all nations. It yielded the artificial incumbrance of inflection, and as the people advanced in thought power, the idea of logical relation took the place of those artifices which the infancy of thought had employed in its laborious attempt to express itself. "Phonetic decay" is at work in all languages; and a disregard of syllabic inflection is an evidence of advance in thought power.

The untutored savage adds syllable to syllable, and can not feel his thought as a whole. Like the compound eye of a fly, he has a mosaic picture, beautiful, it is true, but lacking the skillful blending, which more advanced thought power will give. The German language was "crystallized by printing", and its form fixed before the attrition of long use or contact with other people had worn away the remnants of the artificial. The arbitrary system of genders, unnecessary as it is cumbrous, would long ago have disappeared, had it not been fixed by printing, and jealously guarded and propagated by grammarians. When we now attempt to make German the language of our people, or any part thereof, we can be but temporarily successful. The language which depends upon the logical association of the words expressing thought, leaving the intelligent mind to grasp the meaning without a resort to artificial methods, will prevail, and the last remnant of artificiality will in time disappear—witness the persistent disregard of case form among the English speaking people. Without doubt the English will be the language of this country. But the law authorizes the teaching of German in our schools, and it is highly proper that it should be taught.

The memories of fatherland are sweet, and the sound of the mother tongue on the lips of the child, makes the father feel that his child is not separated from him. The vast storehouse of the German needs but this key to place its riches at the command of him who can use it. There are difficulties presented in the management of our schools where two languages are taught at once. The best experience has taught us that the lines of instruction should be parallel.

The power of thinking in two languages will counterbalance any supposed deficiency in either, and the two languages will give, in their reciprocal influence upon each other, linguistic culture, and will render pupils better trained than those who have drawled through the abstract formulæ of so-called English grammar.

Like chemistry, teaching is an empirical science; even its elements are in dispute and no question obtrudes itself upon us more persistently than this, "What shall we teach?" The English language is now beginning to receive some attention. It has been the chief endeavor of each succeeding generation of youth to force its lithe form into the greaves and corselets of fossilized Latin and the attempt has been rewarded by a practical ignorance of the use of the language. The use, rather than a fancied grammatical construction, is now attracting the attention of advanced thinkers. In the best schools, there is an attempt made to induce habits of correct expression. How much better this than to force the "dry-as-dust" theories and subtile distractions, food fit for a metaphysician, upon the innocent. But the greater number of teachers still cling to the shore, or, if they venture beyond their depth, surround themselves with the cork-jacket of Murray or Kirkham. The still small voice of nature is beginning to be heard in the land. She stretches her bow of illuminated wonders before the eager eyes of her children, and entices them to walk in her fields and find delights mingled with instruction. Clothed with majesty and beauty, she awes and allures; cunning and deft her hand weaves a fabric of wonders, which clothes the mind with understanding of her ways, and she wields a wand which breaks the spell of mystery and opens to thought new thoroughfares of observation. Scientific instruction furnishes the material for thought and, at the same time, makes a man a better getter of bread. The investigation of fossilized forms of thought furnishes good training for certain professions where metaphysical research is useful, but will not the habit of careful investigation and the tracing of effect to cause, which is preeminently the method of scientific instruction, from the first lesson in objects to the last analysis of which the forces of nature are capable, gain and fix the attention, and enable those who devote themselves to the study of nature to follow out other lines of thought?

The great excellence of Latin, as a branch of study, is, that it affords a means of forcing attention to one thing for years. But the study of what may properly be called science, viz., the classification of minerals, shells, plants, butterflies, and animals for younger pupils, zoölogy, comparative anatomy, chemistry, geology, and the doctrines of the correlation and conservation of forces, affords as much food for reflection as that

of the Greek root or the vocal sherd of Hebrew. Moreover, it is eminently proper that the useful should hold the highest place in all schemes for popular education.

The flood of immigration which pours in upon our land, brings much of the skilled labor of Europe. Artisans are nearly all of foreign birth. American boys do not learn trades; they are not to be found in the workshops. It is all well enough now, but the interests of the future demand that art culture should be made a part of the study of our schools. Train the hand and the eye of the youth of the land to observe the relations of space and to become familiar with the laws of proportions, and not only will the æsthetic culture be advanced, but the children will be determined toward trades. The cities must take the lead in this matter as in every other. In five years mechanical free-hand drawing will be considered an essential part of the curriculum of every graded school in the state. Did not this subject have able exponents before this Association, it would be profitable to pursue it further.

The day has been when our public school system was assumed as a matter of course, and its doings received but little attention. We have ofttimes deprecated the silence of the press and the listless indifference of public men. Other questions which were more immediately pressing, crowded educational matters off the stage. But dangers threatening the existence of public instruction have appeared and are taking definite shape. Questions are asked, and must be answered. If there are wrongs in the system, they must be righted.

Men question the right of the state to teach at all. They criticise the manner of instruction and the subject matter, or the want of subject matter.

We find a great number of our fellow countrymen who think that the schools are run partially, at least, in the interests of a political party. So much so is this the case, that school men are afraid in those towns where the Democratic party is in power.

Another very large party are taught by their religious instructors that the system, as now carried on, is destructive of the best interests of society.

We can not shut our eyes to these things. These issues must be met, and they should be met fairly, and settled on the broad principle of trying all things and holding fast that which is good. Have we within our profession the men to do it? Dare we take up the gauntlet, or shall we lie quietly by and wait for men of other professions to discuss these things which so nearly concern us? If we are honest, and our feet are on the *rock* of truth, we need fear no harm. If we are in any respect wrong or inconsistent, or occupying false premises, we shall fail so far, and we may be sure our enemy will find us out. Let us examine carefully the ground.

In Europe the people are used by the government for the advancement of its interests. It generally exists separate and independent of them. It is the creator and they the creatures. Government is here made by and for the people; they are supreme. They have made and

they can unmake. The citizen has taken the place of the subject. Men have here reserved to themselves the right to do everything which does not contravene the rights of others. The experience of the past has taught us that certain rights were in greater danger than others. These have been esteemed worthy of special mention in the compact which we call government, among these is the right to exercise perfect liberty respecting a belief in God and his worship. For strange as it may appear, in a matter where the fullest liberty has been bestowed by the Creator and where virtue consists in convictions which are the result of entire freedom from restraint, men are exceedingly prone to force others to a feigned admission of dogmas, and a compliance with certain forms, which have been adopted by themselves either by the accident of birth or from choice.

Although it may be an open question, whether the state may compel attendance upon its own schools, yet it must be admitted that under our form of government she has a right to teach, if such right has been delegated by the will of the people. She can direct the whole matter; her power enables her to extend or to limit the course of instruction in quantity or quality. Had such powers been delegated to her, she could teach dogmatic theology and prescribe forms of worship; but she is created for specific purposes, and her powers cease and determine when those limits are reached. The exercise of any power not granted is revolutionary.

The preservation of society, or the protection of the individual, is the great end of government. By common consent we have agreed that intelligent and virtuous men and women will enjoy social life and permit others to do so.

Virtue is the result of convictions of duty, immediately or remotely,—the corollaries of religious influence. Therefore, the state, to secure the highest degree of happiness for the individual, should support religion.

But we have been taught by Him who said, "Render unto Cæsar the things that are Cæsar's", that the church is in the hearts of the people; that she is in the state, not of it,—subordinate departments, but superior and supreme in all that constitutes her a church. Those who make the state, agree that religion consists in the worship of God and living a life in accordance with His laws, but they do not agree as to how or where this worship shall be conducted. The consequence is, that the whole matter of religious culture is left to stand or fall on its own merits. Then we descend to the lower plane of intellectual culture, and here we find a common ground upon which all can stand. The perception of the ordinary truths taught in a common school can not, by any stretch of license, be said to partake of the nature of religious worship. It is, *per se*, neither godless nor godly, and can be said to attain a moral status only by a fiction of theology.

The perception of the mathematical truth, "twice two is four", has less moral character than the braying of an ass, since the latter is founded upon an emotion of some kind, and emotions form the most forcible, if not the highest, religious manifestations.

The makers of the state, then, unable to agree with respect to the

higher form of instruction, have left these to the individual members without prejudice. They have entered into bonds to favor, but not to interfere with,—to prevent hindrances, but not actively to advance religious interests. The state desires the good results, but dare not attempt to produce them.

Men have organized societies for the purpose of specific religious culture. These societies have assumed the responsibility, claiming, all of them, in things spiritual, allegiance to a higher power,—each and all refusing to obey the commands of the state, when it requires a transgression of real or fancied rules prescribed or supposed to be prescribed by a higher power. These societies severally claim the province of religious instructors, each one strenuously attempts to show that it alone is the true expounder of truth, and forthwith expounds. They have issued creeds, testimonies, manifestoes, bulls, blasts, and counterblasts with more or less liberality of sentiment. They are jealous of any encroachment of the state upon their borders. The whole matter of religious instruction properly rests with them and the heads of families, and the state, as here constituted, has and can have nothing to do with it. Upon them rests the moral responsibility; let them do their duty with a tithe of the care that is exhibited by those teaching the public schools, and thorough instruction in the dogmas and formulas of every church could be given, and, what is far better, those sublime truths which the Great Teacher imparted could be made a part of the self of every child in the land.

The state is under bonds to give such instruction as shall fit persons for life, carefully excluding in matter and manner any thing which shall violate the conscience of her citizens. Men should not be made citizens if their conscience is outlawed. Schools are not "godless" when there is no religious instruction given in them, and when specific acts of religious worship are omitted, any more than that bank is "godless" where the banker makes a judicious discount without the observance of a religious formula. And the charge of "godless schools" is a political trick, which will fail to succeed upon its own merits.

Any citizens, either as individuals or as members of a society, have an undisputed right to enter the political arena to obtain any modification of the law which is not revolutionary.

The alienation of the public funds of this state to the support or furtherance of any "form of religion" would be revolutionary, and should be met first by exhausting all the means for its prevention which our laws afford, and then by an arbitration which has been the usual court of appeal in such cases. This government is based upon the will of the majority as regards all delegated rights; these are outside of the government. There is no abstract right outside of the expressed will of the majority. The only place that it can be found in our system is in our courts of equity. It has been confidently asserted that these are Protestant states. Whatever may be our wishes in this respect, it has certainly been shown that these states have no religious character. We have welcomed men of *all* religions and of *no* religion, and our banner is broad enough to cover all.

I know what you love and what you fear, my friends, but you need not fear—that stone which is grinding will grind. Eternal truth needs no armor, and every attempt to encase her lithe limbs only trammels her movements, for she is aggressive and not defensive. The secularization of our public schools is all but accomplished. The acts of worship are omitted, or are very meagre. The schools are generally conducted in such a way that no religion is taught in them. They are not and ought not to be "organized in the interests of Protestanism", unless the diffusion of useful knowledge and the creation of the habit of independent thinking be conducive to the spread of Protestantism and hurtful to the Roman Catholic Church. The introduction of the Bible, in the application of its truth in the government of children, can no more be prevented than the introduction of daylight. Those truths, which are all there is of morality and righteousness, are not to be taught by direct biblical instruction, but by the just disposition of the discipline of the school as is done every day. The great element of moral culture in school is not an inculcation of a feeling of religious obligation, but rather the creating and fixing of habits of industry, a submission to justly constituted authority, and a respect for the rights of others. I wish to be able as a school man to assure any man that his child shall receive no peculiar religious bias from the schools. If any people choose to segregate themselves from their fellow citizens, I know of nothing to hinder. But I must here enter my protest against training any portion of the youth of our land to feel that the laws of the government are in any way outside of and against them. There can be but one safe course in this country, and that is to unify all classes. There is no better means for accomplishing this than that intermingling which takes place in the course of common-school instruction. Statesmen know the value of a community of interest among the people. The pages of the world's history are blackened with crimes of no darker tone than those which have resulted from incompatibility of opinion on religious subjects.

When we look abroad upon the life of our people, we tremble for the safety of republican institutions. Theft, robbery, and murder in the slums and alleys scarce keep pace with defaulting, embezzling, and bribery in the higher walks of life. Lust demands its holocaust of victims every lustrum, and tardy justice lags by the wayside. Liberty has degenerated into license, and society writhes in throes in its endeavor to rid itself of the noxious elements. The daily press teems with exposure of vice, and the English language is taxed for invectives against crime. The ignorant have suddenly become rich, and think that their children must not submit to restraint. They forget that the foundation of all prosperity, the basis of law and order, the entrance way to happiness, is *obedience*. The best moral training many children get is that which they receive in submitting to the systematic routine of school. The acquirement of habits of industry and close attention to duty is a vast moral advantage on the part of any one. True, religious conversion does not follow, but if *you keep the weeds out of a field you have done much toward raising the crop*, although the seed may be sown by another's hand. The inculcation of specific religious instruction is forbidden us. But a wide

field is open; let us enter in and cultivate it. Our kingdom must be ruled by those precepts of wisdom which the Model of perfect human life has given us. And the influence of our efforts, although it may appear limited to our view, will go on with ever increasing circles, and join in the great wave of improvement which in the coming time will place our race far in advance of our highest conceptions.

NATURAL SCIENCE TEACHING IN THE COMMON SCHOOL.

BY W. H. VENABLE, CINCINNATI, OHIO.

To deal, at once, with a vital part of our subject, children should become acquainted with natural objects *in situ*, as parts of a complete whole, interesting and important not only in themselves, but also in their relation to other things. A quarry teaches more than a cabinet of minerals; a wood-land walk more than a *hortus siccus;* an ant-hill in May more than a card of beetles displaying their transfixed bodies through a case of glass. Collections, classifications, specific and generic names, are very useful in their way; but Nature and her beautiful works are best studied, loved, and appreciated in action,—in life, not in death. Even the inorganic world has its vital phenomena,—its forces in action. How much better it is for a child to learn *crystallography*, by observing the wonderful manner in which solids are born of liquid solutions, than by looking at a few labeled specimens in a dusty box. Plants and animals are certainly studied with most profit in their native haunts. What the beginner most needs is a taste for nature, habits of observation, and a method of investigation,—not laws, conclusions, scientific categories and results. The summing up of facts, and final statement of principles, is the work of trained thinkers, not of unpracticed school-children.

What the tyro wants is knowledge,—abundance of definite knowledge. Some teachers, having a profound regard for what is termed "discipline", seem to conceive of that as capable of existing independently of knowledge, which is as if one should imagine his skeleton to be developed without any connection with muscle. Nothing can come of nothing. Discipline comes from knowledge, at least from the manifestation of knowledge as material. The reason it is so hard to interest boys and girls in scientific text-books may be understood, when we recollect that these books are mainly summaries and general statements, dependent upon a vast accumulation of facts and experiments that the boys and girls have not witnessed. On the very first page of the book, the pupil is told that "science is knowledge reduced to system";—it is the teacher's duty to point to the inference that, without some knowledge to begin with, it is absurd to suppose it possible to possess any science whatever. Science is not ignorance reduced to system. The pupils must be induced to *take notice* of what lies around them, or else all attempts to teach these principles and laws are hopeless. They must study things

and their properties, and learn to distinguish what is significant in nature from what is not. Many people read books through as if all parts were of equal value; and they apply the same judgment to the study of plants and animals. They really busy themselves with the shells and husks of truth,—with words and forms. It was out of a profound conviction of the shallowness of popular teaching that Emerson wrote:

"Give me truths;
For I am weary of the surfaces,
And die of inanition. If I knew
Only the herbs and simples of the word,
Rue, cinquefoil, gill, vervain, and agrimony,
Blue-vetch and trillium, hawkweed, sassafras,
Milkweeds, and murky brakes, quaint pipes and sun dew,
And rare and virtuous roots, which in these woods
Draw untold juices from the common earth,
Untold, unknown, and I could surely spell
Their fragrance, and their chemistry apply
By sweet affinities to human flesh,
Driving the foe and stablishing the friend,—
O, that were much, and I could be a part
Of the round day, related to the sun
And planted world, and full executor
Of their imperfect functions.
But these young scholars, who invade our hill,
Bold as the engineer who fells the wood,
And travelling often in the cut he makes,
Love not the flower they pluck, AND KNOW IT NOT,
AND ALL THEIR BOTANY IS LATIN NAMES."

Country teachers have peculiar facilities for acquainting themselves and their pupils with the material of natural science, and they are scarcely excusable if they neglect their opportunity. Soils, stones, springs, trees, flowers, moss, birds, insects, snails,—ten thousand objects of interest may be brought under the observation of the farmer's children. Let the scholars be induced to study the natural history of their own homes. Put into their hands such books as Wood's "Selbourne." Ask them to write compositions on familiar natural objects. Take them on excursions. Make them realize the significance and worth of what lies at their feet. Teach them the use of the *microscope*,—but, above all, the use of their minds. Bring them close down to nature that they may feel her mysterious life, and catch the spirit of her operations. There is a just complaint that scientific teaching is apt to be sapless and soulless. It is a pity if our instruction tends to narrow the pupil's mind,—to make him underrate other knowledge than that of bare facts,—and to depreciate other than scientific culture.

Before submitting the subject to general discussion, I wish to allude to what I think a common abuse of the natural sciences, by those who profess to teach elementary science in the form of object lessons. I mean the practice of amusing the children with the curiosities of natural history, chemistry, etc., without creating any correct habits of study, or any real interest in the more substantial parts of the subject taught. It is easy to interest children in wonders, but minds that are habitually aroused by novelty, are almost sure to lapse into hopeless lethargy when

the novelty has lost its charm. Many of us have experienced how hard it is to make anything of a class that has had the edge of its appetite for study blunted by feeding on scientific marvels for a few months. The curiosities of botany and zoölogy, the brilliant experiments of chemistry and physics ought to be distributed along the whole course of study, and be utilized as a gentle and constant stimulus. It is as unwise to expect to develop a taste for scientific study by a course of highly seasoned, marvelous lectures, as to create a healthy desire for plain food by a preliminary diet of spice and confectionery.

DISCUSSION OF MR. VENABLE'S PAPER.

C. L. Hotze, of Cleveland, opened the discussion as follows:

I anticipate two great dangers in all our science teaching. One is that we shall overload our pupils with a great many isolated facts. In this particular, I perhaps disagree with the opinion expressed in the paper just read. A few facts well presented, well chosen, will, in my humble opinion, produce more good than a great many facts, the connection of which may not be readily understood by the pupil. A few facts well selected, bearing directly upon the laws and principles that you wish to introduce, will enable you to use the inductive process of reasoning, and I take the liberty of putting it forth as an article of my creed, that in our common schools, especially in the lower classes, we must employ inductive reasoning as a preparation for the deductive. As we go up in the system, the two processes should, all the time, be linked together, while in the high schools we may have more of the deductive than the inductive. I may be mistaken in this particular, but I wish to call your attention to the fact that the best results in teaching science have been reached by the inductive method.

The second great danger I anticipate, is the fear of errors. I have met with a great many persons within the last three years, who have told me that they were willing to commence the teaching of any desired science in the school, but they did not feel quite safe in undertaking it, being afraid lest they might now and then make mistakes,—might state a scientific principle incorrectly, or bring out a fact or process of reasoning or a law in a deductive manner; in other words, they feared that they might occasionally commit errors. Other teachers, who do not plainly object to teaching science in grammar schools, are, for this reason, quite slow in introducing it. If there are any reasons for this fear, I do not see why it may not apply to almost everything we teach. There is hardly a teacher in the world that does not make a mistake now and then. It is not so much by avoiding errors as it is the enunciation of truths,—the actual teaching of good things,—that we accomplish that which is of lasting benefit to the young. Although errors may occur daily, we would not say that arithmetic and algebra should not be taught. It is true that more errors may be made in teaching science than in teach-

ing arithmetic, because science admits of a great many more errors than any other subject in our curriculum.

But methods of instruction in natural science is the title of the paper. I think that all our efforts in teaching science crystallize into three distinct methods. The first may be stated very briefly thus: Superintendents of schools make out a long syllabus of science teaching and print it in their reports, and then say nothing more about it, and year after year passes and no teaching of science is ever done. This is one way of teaching science. (Laughter.) This is not an imagination of my brain. It has happened, and, I may say, is happening in one of our largest cities, though with the fair prospect of its being speedily remedied.

The second method I would call the method of recreation,—a method commonly adopted, perhaps, under another name, as a method of awakening the interest of the pupils. How easy it is for a teacher to awaken an interest in the opening part of the lesson, to run on a little way, then to conclude the lesson, and be happy over it. (Laughter.) Now this teaching of science as a recreation is, in my humble opinion, not all that we should attempt, especially in view of the fact that we have our pupils only four or five hours every day. The advocates of this system, if so it can be called, tell us that in Germany it is quite common; that science is there taught by weekly or semi-weekly lectures. This is true, but we must remember that these lectures are graded and run all through the system, beginning with the youngest pupils and ending where the whole education of the girl or boy ends. They are given, too, by men trained especially for this purpose. Professors of European reputation go down into the elementary schools, and deliver lectures once a week to the little ones. We must also consider that the German school opens in the summer at seven o'clock, with a recess from twelve to two o'clock, and closing at four or five o'clock—say at five o'clock. Sometimes from half-past four to six, the pupils make excursions with their teachers, studying botany, and speaking one or two foreign languages at the time of the excursion. Here we have to deal with an entirely different problem. We have more pupils and less time. At the end of a year or two or three years, this system of teaching science as a recreation results in a certain indifference on the part of the pupils to whatever is presented to their minds, and also a certain insufficiency of preparation on the part of the teachers. It results also in a want of system in the presentation of the matter, or, as the old adage has it, "Something of everything and nothing of anything in particular." I dislike very much to depreciate any efforts made in behalf of object lessons, but I fear that unless object teaching is carried on in a little more earnest way than simply that of interesting the pupils, when the pupils reach the higher grades of schools, there will be a certain want of application and a lack of intensity in study. In one of the largest cities of the West, this method of teaching science has now been used about eighteen months, and I learn from an abstract of the proceedings of the board of education of that city, held two or three weeks ago, that a little stir was made by a motion to appoint a committee to investigate the proper method of giving instruction in physical science, based on a complaint of teachers that they

had not obtained good results. The teachers put it on the ground of not having a sufficient quantity of apparatus. I am afraid that what is charged to insufficient apparatus, ought to be charged to the system.

The third method that has come to my notice, is what I call the natural method. It seems to me to be the only method that promises any good fruit. It is an exceedingly simple one. It commences with one or two experiments, or with a few facts, and by a process of inductive reasoning leads the pupil to see that there is something with which all these facts actually blend, and that is usually a law. The human mind is so made as to have a tendency to bring all disconnected facts under some law, as the law of gravitation, for example, though we are careful to say that this law may be all wrong. It may not be true that objects are attracted to the earth. We do not know anything about it. All we do know is, that they approach the earth, and that is another thing. When the pupils are taught a law, they learn what applications may be made of it. I am confident that good results may be obtained by this method, but I do not know that they will be satisfactory to every body. This much is certain, that it has been tried in various towns and cities, and so far it has been found successful.

A great difficulty in the use of this method is the fact, that most of our lady teachers (I see now that the ladies are a little more attentive to me) [laughter] are a little averse to making experiments in the schoolroom before their own classes. I have found this to be the case in all the states in which of late I have traveled. There is but one thing that will remedy this difficulty, and that is to make these ladies commence this work. I have seen ladies who, one, two, or three years ago, hated very much to perform any experiment, even the smallest, go to work fearlessly and undauntedly in giving simple experiments. Without experiments very little can be accomplished in teaching science, more especially physical science, which is best adapted to common schools. Some two or three months ago I was in one of the large cities in the East, and I was invited to go to a private school—one of the most excellent schools I ever saw. I was introduced to a class of young ladies who had been studying physics for over a year. The lady teacher told me that she had not performed a single experiment, nor had any body else, and happening to have a little test tube with me, and a perforated cork, and glass tubes, I made a little jet, and asked for the cause of it, and not one of the whole class could tell. It was a simple experiment, one that any body can perform—a child of eight years—yet this respectable class, proficient in French, English, and Latin, knew nothing about it.

Dr. S. G. Williams, of Cleveland: If I understand the gist of the paper rightly, it was rather the discussion of how we shall interest young people in nature than how we shall teach them the natural sciences. I think many of the suggestions of the paper, as directed to the object I have named, are admirable; and yet it strikes me that some of these suggestions are possibly a little impracticable. I know that it is a very excellent thing to see nature living and acting under its normal conditions, but when we are talking about methods of teaching the sciences

in the schoolroom, we are speaking of that which can be practiced in ordinary schools and by ordinary teachers, and the lack of time and of opportunity in most cases would possibly preclude the method presented. I know that the study of the life of the ants in their natural home is a very pleasant thing, if we can set young children down by the ants' nest and lead them to a proper and careful observation of these creatures; and yet, after all, this is not science, and it is not, in any true sense, the study of science. The study of the habits of ants can be pursued by young people to but a very slight extent in that way, and the study of the objects of natural science by actual observation would, it seems to me, lead to quite unsatisfactory and meagre results. There is something beside the habit of mere external observation in which we should seek to train even the youngest pupils. Observation is to be directed, not simply to those phenomena which strike the eye at once, and which every careful child, I think, has observed pretty competently before he enters the schoolroom, but the intellect must direct the physical sense right to its object, and this, it seems to me, is the kind of training of the observation that we wish to have introduced, as far as possible, into our schools. There is danger in the study of natural science, the science of observation, observation properly so called, that we shall get too great a multiplicity of objects, as there is that we shall get too great a multiplicity of facts in the physical sciences before we begin to make any use of them, as has already been well presented. I think that there is a kind of scatter-brain habit of so-called observation unwittingly inculcated in this way. Whether the teacher presents a system to his pupils or not, he should conduct all the observations by a regular and thorough system existing in his own mind, and by this means alone, I think, can the teacher produce any satisfactory results. The observation is for the purpose, not simply of the observation, but for the use of it and other similar observations, finally, in the formation of a system. Pupils should be trained as early as possible, not simply to make observations upon one thing, and exhaust all the properties of that one alone, but to take objects on the outside quite dissimilar, but belonging to the same class. If studying worms, for example, they should take one of our ordinary snails, and one of our ordinary mussels, and, placing the two things side by side, see that they belong to one great type of life, though their differences are so marked that they strike the mind of the very dullest observer. Here is a very slight exercise of comparison upon objects very dissimilar; and by gradual stages the child may be led to extend the comparison to objects more and more nearly alike, and see that they are arranged, finally, into a system based upon their resemblances, and that these different classes are separated from each other on the differences which they present. I should teach botany, the natural science with which we have most commonly to deal, as a science of exhaustive observation, commencing somewhere upon the plant and ending somewhere, so that I may know when I get through and have made a complete observation. Not only should I place plants side by side which are quite dissimilar to each other, but, after repeating those observations, I should call attention to the points of difference as well as to

those points in which the plants are alike, leading the children thus to a knowledge of the larger parts of the system at first, and the names afterward. By commencing in this way with objects, and giving names afterward, we can proceed to the system. Systematic names are no more difficult to learn than any other names. A name is but a name after all, and I add one more name as I have one more generalization to which I wish to give a name. There is a difficulty usually in the method of teaching natural science, even a science so very systematic as botany. We commence at the wrong end. We commence with the system, presupposing a kind of knowledge of the system, and afterward proceed to the individual facts. This, it seems to me, is not the true method. We should certainly commence with the individuals, and proceed from them to the system; but we should have the system always in view. A teacher of great experience, and to whose opinion I always pay great deference, objects to this plan, and the objection has been made during the time of Association. She says that in the high school she would prefer to teach pupils who have had nothing said to them with reference to the natural sciences in the lower schools. She finds that the "wire edge" of curiosity and interest has all been taken off by the teaching that had been attempted, and she has very much more difficulty in securing a living interest in those subjects than she would otherwise have. I think that this objection, so far as physical science is concerned, has already been touched upon by the gentleman who commenced this discussion. So far, however, as the sciences of observation and classification are concerned, I should think that it might be obviated, if, from the outset, the course that has been recommended should be adopted, and we should make our observations always systematic and always tend to system, and not simply lead the children to that sort of habit of vagrant curiosity which so easily satisfies, and leaves the child for ever after satisfied.

PRES. E. T. TAPPAN, of Kenyon College: It seems very clear that different objects are aimed at by the different methods indicated. Mr. Hotze proposes in the teaching of physics to lead the children to the habit of inductive thought, a most excellent thing, and if every teacher of physics would thoroughly appreciate the method proposed, and prepare himself studiously to reach this result with children, we would have physics taught to much better purpose. I commend what he has said upon that subject to every teacher. But the teaching of natural history, referred to by Professor Williams, is a different thing, and he proposes a different object in teaching it; that is, the training of the child in habits of observation, leading to classification and generalization—a very valuable object—and I agree with him that the best instrument that we can use for this purpose is the several branches of natural history, as distinct from physics. But, Mr. President, let us not forget the thought that was expressed in the paper of Mr. Venable, that we should teach natural science *in situ*, in the place where nature is alive; and his object is to cultivate the taste so that we may have not only the inductive method of reasoning and the habits of classification, that we may think well and arrive at correct scientific results, but that our tastes and feelings may be elevated, and that we may see more in nature than merely scientific results. Mr. Ven-

able is a poet, and he has written from a point of view which we ought never to forget in all our studies of nature. Let us cultivate our hearts so that we may be able to use this means in bringing out this higher culture with all the children. [Applause.]

M. C. STEVENS, of Salem: I was very much pleased with the general tone of Mr. Venable's paper, but I thought that some of his illustrations were rather highly drawn. But as he is a poet, he has, I suppose, the poet's license. [Laughter.] For instance, he tells us that the pupil can learn more by going to the quarry than he can in studying a cabinet of minerals. If he can visit all the quarries of the country, and become familiar with all the minerals, he will thus learn more mineralogy than he will from the cabinet. But in most localities, this plan would not enable one to become very familiar with the different minerals of the country. In some parts of Ohio, the quarry would be limestone; in others, sandstone; and it would be a very meagre knowledge of mineralogy that the pupil would get from it. Hence I think that this is rather over-drawn. I agree with Mr. Williams that the object should be to cultivate the faculties of the mind by observation for the purpose of classification and generalization. This certainly can be done in the branches he suggested. It seems very strange to most persons that Agassiz should be able to describe an extinct fish from a small portion of it, and to draw it on the board so accurately that when the cloth was removed from the fossil, the drawn representation should be found nearly perfect. But yet those persons who have been in the habit of studying these subjects, and of generalizing, will say it was not so very much after all. He had made this subject a specialty, and he was able, from a small fragment, to present the details of the fish. So the child can be very soon taught to take a very small portion of a plant, and describe the kind of plant on which it grew. Even the leaf or the flower will be sufficient, and it will take but a short time to make these rapid generalizations. It should be the aim of every teacher to lead the child to pass from the thing to the class to which it belongs.

PROF. E. A. STRONG, of Michigan, being called upon, said: I quite agree with what has been said. The chief mistakes now made in teaching, lie, I think, just in the directions indicated. I have seen a great deal of natural science teaching, but I can not say that I ever saw much in the lower schools that was worth anything. When pupils come to the high school, the teachers would rather have them fresh than have them possess the fragmentary knowledge they usually have. We were just told that from a few observations pupils will rapidly make generalizations. They will, Sir; and that is just the difficulty to be avoided. Generalization as taught in systems and tabular views are thrust on the pupils, and they do not see much else. It is a very hard thing to get nature into the school-room. I like the tone of Prof. Venable's paper. I was exceedingly interested in it. It has a truth which is all the more valuable, because it is a line seldom taken. The difficulty is, that we generalize too early, before the pupils are prepared for generalization, and hence the generalization is of no worth. We get along too fast, it

seems to me, in these things. I would teach natural history in connection with language. It is not a small thing to see a pin drop, and tell exactly all that has happened neatly and well. The very smallest things about the school building, and the simplest experiments, should be seen thoroughly and fully, and then described thoroughly and fully. It is the habit of using language neatly and exactly in this way that I value, and the habit of seeing a thing just as it is. Ruskin says, and truly, I believe, that the seers are more rare than the thinkers. A man who can see with the artist's eye and the artist's soul simply is a rare man, and is rare because few men are in the habit of seeing; and that habit I would give the pupil. I would like to see the natural sciences and physics taught in grammar and intermediate schools much better than I have ever seen them taught.

JOHN HANCOCK, of Cincinnati: I had not thought of saying anything on this subject, but the discussion has taken such a turn that it seems proper that something be said respecting the importance of the teaching natural science in the lower schools. It is a well known fact that not more than three per cent of all the pupils in the public schools of Ohio or of any other state are in the high schools, and probably this per cent will not be largely increased at any time. The great majority of pupils must learn the elements of natural science in the lower schools, if they learn them at all. This fact shows that the teaching of science in the primary and grammar shools is a matter of such importance that we ought not, by implication even, to discourage its introduction into these schools. The best means of leading a child's mind into simple generalizations, is through the study of nature, and I agree with Mr. Hotze that there are not, perhaps, more mistakes made in teaching natural science than are made in teaching other branches. Our teachers, unfortunately, are not perfectly acquainted, as a general rule, with anything that they attempt to teach, and they must make more or less of mistakes. If there is anything established in the philosophy of the human mind, I think it is that generalizations from external objects are those most readily made, and hence natural science, instead of being at the top, in the high school or university, as is sometimes claimed, should be at the bottom where every step of the child in generalizing may be perfectly sure. [Applause.] I regard the question of natural science in the public schools as the most important one that can engage the attention of educators. The utility of natural science in the lower grades of the school, both in a practical point of view, and also as a general trainer of the intellectual faculties, will receive a far wider recognition of educators in the future, than it has done before. I am sure that we shall vivify our instruction by the use of external nature far more than we have ever done by any of the artificial book methods by which we have attempted to lead the young child into those higher regions of thought which are the end of all education.

DR. WILLIAMS: I rise to correct the false impression I made in what I said a moment ago. I thought it had been indicated or hinted that generalizations might safely be rapidly made, and I thought it might be a

natural inference that generalizations might be at once made without seeing anything at all. It was that sort of teaching I intended to hit—the teaching of natural science without seeing natural things, and running to over-hasty generalization.

MR. STEVENS: That was not the kind of generalization that I referred to.

PROF. S. M. B. SILL, of Detroit, Mich., being called out, said: While pleased with the discussion generally, I like very much what has been said by Mr. Hancock. It has been said that to show pupils the more striking experiments and to teach them the more interesting parts of natural philosophy, as perhaps would be done in the lower grades, removes the sharp edge of curiosity and interest, and to that extent unfits the pupils for the more thorough study of the subject when farther on in the course. I think there is less in this argument than may seem, at first sight. Most children will eagerly witness the same experiment repeatedly, as I have often noticed, and will think much about it each time. The point was well made by Superintendent Hancock that but comparatively very few pupils can stay at school to take anything like an extended course; therefore, I say, let all pupils, even before they can fully comprehend them, see the experiments and hear the novel truths. Such instruction has awakened in the mind of many a boy and girl a train of thought, an interest which otherwise never would have been aroused, and which has led to determined study and noble fruit long after school days were things of the past, rescuing many an hour and many a life from devotion to worthless or vicious literature, and a depraved career. Those, in a condition to know, tell us that but a small proportion of the delighted audiences which last winter listened to the matchless Tyndall had ever had the advantages of an extended education. By all means, if possible, let every child place its hand on the upper end of an open receiver, exhaust the air below, and let it *feel* the pressure of the air. The weight of the atmosphere will no longer be unknown to him, and he will be enabled to understand a hundred things useful and interesting, if he never sees a philosophy. Let it be understood that this applies only where no more can be done. When any definite teaching can be done let the classes avoid the common blunder of going over too much ground, but let them *master* a little as a sure foundation for future acquirements. For example, let wave motion as affecting sound be thoroughly understood before attempting to deal at all with the undulating theory of light and heat. All who have taught these things know how often the teacher must aid the understanding of the latter by reference to the former.

In the paper under discussion, and in the remarks of some of the speakers, we are told to go to the quarry, to observe nature herself, and not to study from cabinets, etc.—excellent advice in its place. Let the pupil observe, of course, all he can, but let us remember that instruction in the public school must be given in the school-room practically, whatever we may wish. Those studying zoölogy, botany, etc., can not wander over all lands and seas. The fortunate young geologist of Cincinnati, where the old Silurian limestone comes to the surface, may find

every piece rich with fossils, but he will have only one formation of the whole series, while the pupil of Wooster and Mansfield can see only the comparatively barren Waverly limestone. The teacher should collect museums and cabinets, and he should use simple text books, not as his substitutes, but as his assistants. The statement may subject me to the charge of being heterodox, but I do not believe in teaching science by beginning with facts and ending with generalizations. It is often better to begin with the system, the generalization, and then proceed to details.

PRES. O. N. HARTSHORN, of Mt. Union College, Ohio: There is one point in the paper of Mr. Venable that perhaps may not have struck every teacher as it did me. In urging the importance of observing nature, I think he depreciated a little the value of apparatus, specimens, and a well selected cabinet of minerals. Though I would not disparage the study of nature, I would make the largest possible collections of natural objects, as has been done in the national museums of Europe. We can not compete with nature, but we can give our pupils only a limited view of nature in our excursions, and I think it will be better for them, usually, to take the excursion after they have studied collections. We have no very great difficulty in getting our boards of education, and the people who pay the taxes, to construct good schoolhouses, furnish them with fine seats, etc., but they are very reluctant to purchase collections of specimens in mineralogy, zoölogy, and the various other branches of natural science, or to supply apparatus to illustrate fully and accurately philosophy, chemistry, astronomy, etc. They do not, with few exceptions, appreciate the utility of these things. There are too many teachers that do not fully appreciate their value. It was the simple experiments of Professor Tyndall that made his lectures so interesting and plain to the people, notwithstanding he treated his subjects technically, scientifically. His experiments will be remembered in years to come; and that is the kind of instruction that we need in our primary and higher grades of schools, whether we commence with the object and then go to the analysis, to the induction, to the definition, to the general principles, or whether we commence with the general principles and then go to the facts, specimens, and experiments.

S. D. BARR, of Cleveland: It seems to me that we are not very far apart. We all agree that it is a grand thing to obtain facts from observation, but we do not hold them with a firm grasp until we have made proper generalizations. Savages are keen in observing, and perhaps observe more widely and more closely than cultivated men, but what raises man in the scale of being is this power of broad generalization which must follow the observation of facts. I am glad, from the bottom of my heart, that more attention is now being paid to the study of physical science by close and accurate observation. We have studied the dry abstract knowledge which we find in books, to the neglect of nature far too long. We may study painting in books, and gain a good deal of knowledge of the art, but what is this compared with the knowledge we gain from looking upon art in pictures? We may study music, and we may understand it in all its fullness scientifically, but what would all

this be worth to us if our ears had never been unlocked to the glories of rapturous music? Having listened to music, having had our souls exalted by it, we then appreciate the theory of it, and comprehend it. So it is not the mere study of books that gives a knowledge of nature. Let us study good books more thoroughly and more broadly, and bad books less; but I pray let us not neglect this great book which the Almighty has spread open before us all, from the youngest to the old gray-headed man.

THE PHILOSOPHIC STUDY OF LITERATURE.

BY PRESIDENT J. B. ANGELL, OF THE UNIVERSITY OF MICHIGAN.

[We are permitted to present only an abstract of this excellent address.—ED.]

The question before us is how to study literature so as to comprehend its spirit and its life. Many of the histories of literature fail in this.

I. A few practical suggestions concerning the method of studying any literature may first be given. The scholar should, at the outset, direct his attention to the great leading writers, the authors, whom the Germans call epoch-makers. Such men are Chaucer, Shakspeare, Bacon, Milton, Scott, Wordsworth. Whoever knows these, in an emphatic sense, knows the literature. An effort should be made, by the study of biographies, portraits, anecdotes, to learn the personality of the authors, that they may be living beings to us. Having learned the great authors, pass to the second order, and so learn groups. Then if you wish to take up the minor writers, do it according to your taste or convenience. But make a practice of reading with pen in hand; and talk over your reading with some congenial friend.

II. We must try to go behind authors to the study of the national life, which gives form to a national literature, if we would learn the real spirit of the literature. It is only thus that we can appreciate its highest significance.

III. We must endeavor to study not only literatures, but literature as a whole, which has its laws of development and growth. The study of these laws need not diminish the tenderness or strength of our sensibility, as some might fear, but may add new pleasures to all our other joys in communing with the great masters of thought. It may show us, for instance, that there seems to be a law of succession in the development of the different forms of expression in literatures. As a rule, we get first the epic, then the lyric, then the dramatic poems, and later the great prose works. This was illustrated by reference to the Greek literature, and the apparent exceptions in the German, the English, and the Jewish were explained. The growth of a national literature is normal, not accidental,—the outgrowth and expression of a life.

IV. Each literature is heir to the wealth of its predecessors, and bears some marks of its ancestors' peculiarities, and should be studied with its lineage in mind. The connection of the Latin with the Greek literature,

and of the modern literatures and languages with the ancients, was traced in illustration of this. It is almost impossible to think a new thought, or coin a new expression, in these latter days. The novelist and the dramatist find that nearly every variety of plot has already been exhausted.

V. But the literatures, which have sprung from a common ancestry, have not grown up independent of each other. They are inter-dependent, and the careful student will observe their reciprocal relations. The mutual influence of English and German writers during the last century and a half was described at length.

VI. While literatures are thus related, yet each one has contributed its own peculiar part to what may be called the great world-literature, so that we in this age are the heirs of almost every conceivable variety of intellectual wealth. The peculiarity of each prominent literature was briefly characterized and set forth. Progress is really made, as the world goes on. The ancients did not do all the thinking for the race. No one doubts that the world advances, and so literature, the unerring exponent and recorder of its life, must also advance.

VII. It is sure, then, that literature is not the evanescent, intangible thing it is sometimes thought to be. It is often regarded as a useless adornment of life. Facts, facts, shout all the Gradgrinds, far and near. They forget that there are facts of mind as well as of matter; that the man who recreates the vanished life of a departed nation, as truly shows us the footprints of the Creator as does the geologist who reads the language which God has stereotyped on the hills. Regarding literature as embracing all recorded thought, we may claim that the study of it includes the study of all that is noblest in human achievement.

In conclusion, then, let the student not content himself with admiring poems, dramas, orations, as phenomena alone, but let him seek the laws which govern their relations, succession, and growth. Mark their connection with agriculture and manufactures, with commerce, with civilization, with peace and war. See that literature is not merely a hired mourner, or a skillful embalmer, but a living and life-giving power, which keeps fresh in eternal youth the goodly thoughts of all time. Above all, do not fail to see in the wisdom of the laws which determine the growth of literature, the goodness of the great Lawgiver. Attune your ears to catch the harmony which rises from the many-voiced literature of the world as a jubilant anthem of praise to the great Maker of the human mind!

DRAWING IN THE PUBLIC SCHOOLS.

BY ARTHUR FORBRIGER, CINCINNATI, O.

Ladies and Gentlemen: When the chairman of your executive committee made me acquainted with its wishes, with reference to a discussion of Drawing as a subject to be brought before this meeting, I was somewhat taken by surpise that the selection should have fallen upon

me, especially as I am not accustomed to public speaking. I felt as though I ought to decline the honor on that account; but the assurance that an elaborate speech on the subject would not be expected of me, but instead of that a practical illustration of the best methods of teaching drawing in public schools, I accepted the invitation.

The gentlemen referred to stated to me, at the same time, that it was the wish of the committee that I should speak on "*Drawing from Natural Objects*", and I even find an announcement to that effect in the *Michigan Teacher*. I gave my reasons at the time why I should not like to take this as my subject, and I will repeat the same here. To be brief and not waste any time in preliminaries, I would say to you that I consider drawing from the object as the end, and elementary drawing a means to that end.

If you were all well informed as to the different methods now in use, as far as elementary drawing is concerned, you would at once see that this would be the most improper course for me to pursue, and not logical itself.

The short space of time which can be granted me for this purpose, on this occasion, precludes the idea that an audience like the one I have the honor to address, could reasonably expect me to touch every point connected with this extensive branch of popular education. I therefore shall, after some general remarks on the subject, which can not be avoided, and are necessary to make the more practical explanation and illustrations more readily understood, pass over to the practical work in the schoolroom.

Education is divided into three main branches: 1. Popular or common education; 2. Technical education; and 3. Scientific education. In the same way the instruction in drawing not only admits but requires the same main divisions: 1. Elementary drawing; 2. Technical drawing; 3. Artistic drawing.

The elementary instruction in drawing has, like all other branches of education in our schools, the general education of mankind as its aim. It makes the correct recognition of form possible, without neglecting the cultivation of a full command over the hand. It disregards any particular calling, and is the safest and best foundation for the two other divisions. The technical instruction in drawing aims to supply a material and special want; as, for instance, the instruction in drawing for builders, masons, locksmiths, cabinet-makers, etc. The instruction in artistic drawing is real art education, and its aim is the visible representation of ideas.

We now pass to the theoretical part, the significance and purpose of drawing as a branch of education.

"*The form is the medium for the development of the power of thought and speech.*" With this expression the great Pestalozzi assigned drawing, as representation of form, the first place among other branches of popular education, and especially in public schools. Drawing is necessary, as a preliminary exercise to instruction in penmanship, for every mechanic, and for the educated citizen. A want of good taste in all relations of life and awkwardness, on the part of mechanics, are the direct result of a

neglect to study drawing. There can hardly be found a trade which does not require the abiilty to represent, and not a vocation which does not require a versatility in criticism of form. Do we not often hear persons deplore the want of a proficiency in drawing, when they wish to explain to others what they have seen elsewhere, and which they find impossible to explain in words.

Not only for the boys, as our future business men, but also for the girls is the acquirement of proficiency in drawing of the highest importance, and if there is any sphere adapted to gain ground for the solution of the vexed question of the day, "*woman's labor*", it is drawing, inasmuch as such activity requires less physical power, but, together with the corresponding education, a taste for the beautiful, which disposition is even more apparent on the part of girls than boys. Aside from the practical use of drawing for the girls, the acquirement of order, accuracy, and cleanliness which drawing, if properly taught, includes, is of great importance to the girls as the future mothers, in whose hands the education of the coming generation rests.

Still more important is drawing as an important factor in general culture and development of the mind. Without it our observation can never take a clear, distinct, and thorough shape. The person who is not able to draw, never can penetrate so deep into the recognition of form, the relation of parts and proportions, as the one who can. The best and purest enjoyments which we derive from a contemplation of the sublime works of nature and art are lost to us.

For these reasons is drawing at the present time more appreciated than ever before; for there is no faculty of the human mind upon which it does not exercise its beneficial influence. The attention of the pupils will become keener, the intellectual powers better regulated, the imagination more animated, and the sense for the beautiful more aroused. Diligence and perseverance in all our work will be the natural consequence. In short, as a proficiency in drawing is required in most vocations of life, it should by all means be taken up as one of the most important educational factors, and fostered as such in all our public schools.

Taking it for granted, that its importance as a branch of popular education is generally admitted, the next questions, which naturally must arise, are: "How is it to be taught? Which are the best methods? Can it be taught successfully?" Let us consider these questions.

We all know that our love for a study increases in the same ratio that it is made interesting, and we profit by it in the same degree. We all know that almost every child has a natural inclination and fondness for the imitation of the forms of nature. Hence, the proper development of the pupil in this most useful branch of education, is, as in other studies, dependent upon the amount of *interest which can be maintained.* It has, however, been observed that the enthusiasm which generally is manifested so decidedly at the outset, often rapidly abates as the difficulties to be encountered make their appearance.

The reasons for this not being inquired into and the remedy found, it is frequently abandoned as a study, and teachers content themselves in the belief that want of talent and aptitude are the governing causes.

Experience has, however, shown that the loss of interest is by no means confined to those pupils whose natural abilities are only moderate, but that even the most talented soon become weary of continuous effort.

The question then naturally arises: Where shall we look for the fault, for fault it certainly must be, which fails to secure for the study of the beautiful even the same interest which is obtained for other and less attractive branches of education? It is in my humble opinion to be found in the arrangement of the drawing-books, the modes in which the student is instructed, and carelessness on the part of the teachers.

The drawing-books now in general use in the public schools, almost invariably contain the completed figures bound together. This, in my opinion, is objectionable, for the reason that the pupil becomes tired of the designs, which are continually presented to the eye, often far in advance of the lessons upon which he is immediately engaged. Thus the charm of novelty is lost, and with it the interest for the study.

Another cause is found in the manner in which the books are permitted to be made use of, by allowing pupils simply to copy the figures as well as they are able, without proper explanation on the part of the teacher. The consequence is that pupils of limited ability find themselves unable to surmount the difficulties which beset them, while the more talented often hurry through their work, and acquire habits of carelessness, and both classes lose the mental discipline and training essential to future success.

It is also my belief, that drawing will not be developed to any great extent, and that it will not become important as an educational element, until it is taught by the class teachers, instead of by special instructors, at least in elementary and lower grades of grammar schools. To gain this end it must be rendered so simple and elementary, that its principles can be explained by any one capable of teaching other ordinary branches in lower grades.

To attain so desirable a result, and at the same time obviate the many objections to most of the present systems of teaching, is the primary object of this discussion.

ARRANGEMENT OF BOOKS AND ORDER OF EXERCISES.

The course of study in drawing must be progressive, and the successive steps so gradual that the transition from one exercise to another is rendered comparatively easy, so as to make it, what it should be, a logical consequence in itself. Such a course well prepared would also include the advantage that even the inexperienced teacher may, by attention, progress step by step in the same manner, as the pupils are instructed. The books should be so arranged that only the teacher should be in possession of a guide or manual containing the complete diagrams, exercises and instructions for the blackboard illustrations; while in the ordinary blank book for pupils only the points should be printed, to aid the pupil in his initial effort, which, as he progresses, are gradually omitted, thus more surely developing habits of self-reliance than if at once thrown upon his own resources. It will be readily seen

that the interest of the learner is aroused, from the fact that he can not see the completed figure in advance, or even imagine from the few points indicated what the form is to be.

The mode of constructing the diagrams ought also to be so arranged that if the pupils should draw incorrect lines in the beginning, it will, as additions are made, and it assumes different ornamental forms, prove its own errors. The result will be found in a more careful effort on the part of the pupil when another exercise is taken up. The elementary exercises ought to exclude organic forms, such as animals, plants, and so forth. This is based upon the principle, conceded by the best authorities, that a system commencing with mathematical forms is more certain to cultivate habits of accuracy, because the least variation from absolute correctness of form is the more readily discovered. The pupil necessarily becomes his own critic, and gains confidence thereby.

The habit of confining the pupil to page after page of exercises in straight and curve lines, as is usual in most elementary works on drawing, ought to be obviated, being objectionable on account of its monotony. My observation is that the same end will be obtained by directing the attention of the student as early as possible to the construction of various kinds of figures, involving the same exercise. The interest thus created prevents the pupil from becoming weary, and he is at the same time led, unconsciously as it were, to cultivate both taste and judgment.

The time that can be actually spent in school hours for drawing being limited, there should be used in connection with the school work a series of supplementary cards of carefully selected subjects, which are designed to be used at home by the pupils, thus affording an opportunity to apply the knowledge acquired to a practice at once entertaining and profitable. Those supplementary cards, as I said before, ought to be selected with the greatest care, and the character of the form of the subject which they represent, analogical to the regular exercises of the class.

The fact that drawing has only recently been recognized as an important educational medium, has been the cause of many misapprehensions as to the proper and most effective modes of teaching it. It has unfortunately been regarded in the light of a special study, purely ornamental in its character, and only to be ventured upon by the privileged few. It can therefore scarcely be wondered at, that teachers as a class have not taken pains to qualify themselves for the task.

Among the most important requirements to secure success in the instruction of drawing, are cleanliness, neatness, and accuracy. Without these no teacher can hope to accomplish good results, and it is therefore necessary to furnish a few hints, which it has been found will best secure them.

First. Pupils should never be allowed to open their drawing-books, or take their pencils, until the teacher has seen to it that their hands are scrupulously clean. Every pupil should also be provided with a piece of tissue-paper, with scalloped edge to prevent its use as a measure, to rest the hand on while drawing in order to avoid soiling the book.

Second. Pencils should never be sharpened during a lesson. More than a full supply, at least three pencils to every two pupils, ought to be kept in readiness by the teacher, so that none may be compelled to sharpen a pencil during a lesson in case of breaking the point. Neglect in preparing for these accidents involves loss of time and results in the soiling of the fingers, which by all means is to be avoided.

Third. Pencils should be sharpened by cutting the wood back 1¼ inches, and letting the lead project about ⅜ of an inch. The use of dull or short points should not be tolerated, as this must prove detrimental. A piece of fine sand or emery paper, glued on a small wooden block for grinding the projecting point, will be found very useful and convenient.

Fourth. Erasers should never be tolerated in a class, since their use will not only induce a careless manner of drawing, but be productive of uncleanliness.

Fifth. The teacher should not permit the pupils to take the drawing-books from the school-room, for the reason that progress is best attained in the use of blackboard illustrations, by keeping the pupils together in the disciplinary exercises.

After reading the above paper, Mr. Forbriger proceeded to give a practical illustration of his methods of teaching drawing in the Cincinnati schools, using numerous charts and figures drawn on paper, and explaining the more important exercises upon the blackboard.

He was followed by JOHN HANCOCK, of Cincinnati, who had been appointed to open the discussion. Mr. Hancock said: The hour does not admit of the discussion of this subject, which ought to be discussed liberally, if at all, and I desire simply to say that drawing, as a branch of study in our public schools, has not only great practical importance, but it has also a general value as an educational agent. It is one of those æsthetic branches which wake up the energies of youth. If we except music, which I believe to be the great harmonizer and civilizer, there is no branch taught in our schools, whose influence will be felt more certainly and beneficially than drawing. There has been much talk about "throwing away money" in teaching drawing and music in our schools. This is a great mistake, and I trust that no uncertain sound will go out from this Association in regard to this subject. The only question on which we can differ, relates to the best method of teaching drawing. We do not arrive at the best methods of teaching any subject in a day. We reach such methods after numerous trials and many failures. We have been teaching English grammar ever since the day of Lindley Murray, by a system which is irrational in the extreme, but we are beginning, at last, to get an idea of what I believe to be true methods of teaching the English language. So with regard to drawing. It will require oft-repeated discussion and failures in our efforts to arrive at the true method of teaching it.

A. J. RICKOFF, of Cleveland: I wish to direct attention of those who feel deeply interested in this subject, to the fact that a gentleman is here

who has been teaching with Mr. Smith, of Massachusetts, for two years past, and who will indicate, if opportunity be given him, what is doing in the city of Boston and state of Massachusetts in this matter of drawing. I refer to Prof. Putnam, of Boston. It is well understood, I believe, that the work which has been begun in Massachusetts is of a different kind from that which has been indicated here this afternoon, and is different from that heretofore attempted in this country, having more directly in view its uses in the manufactories and in the common work of the artisan.

[*See Secretary's Minutes, pages* 314 *and* 315.]

THE COMMON SCHOOL HISTORICALLY.*

BY PROF. DAVID PUTNAM, YPSILANTI, MICH.

The common school, as the name is now usually understood, is a *public* school, managed by the state, or by the body of the people by authority of the state. It is a school open, on equal terms, to both sexes, and to children of all classes, colors, and conditions. It is practically *free*, so that all are able to share its advantages alike, "without money and without price."

We are to look for this school in history, both remote and recent. We inquire, first, concerning its *origin;* and then concerning its *development*, from its germ into what it has now become. In tracing its development, it will be natural to consider the branches of study taught, at different periods, and the gradual enlargement in this respect; the character of the teaching and teachers at successive epochs; the opening of its doors, little by little, until they admit all the children of the whole people; and, if time permit, its management and means of support.

I.—THE ORIGIN OF THE COMMON SCHOOLS.

General history usually divides itself into ancient and modern, separated, more or less completely, by the dark gulf or dead sea of the middle ages. Poetry, painting, sculpture, architecture and oratory seek their origin, and much of their inspiration, on the farther side of this gulf. Law, theology, and schools of philosophy claim to find kinship in old Rome, Judea and Greece.

Dr. Raphael says, that, "according to the traditions of the Rabbins, public schools existed before the deluge, and it is asserted that Adam was not only the first man, but the first schoolmaster, assisted in his labors by Enoch, and succeeded by Noah. After the deluge Shem established and presided over a public school, and his great-grand-son Ebor taught the patriarchs Abraham and Jacob." I have never been able to per-

*Note.—It has not been considered necessary to quote authorities, nor, in all cases, to give credit for statements, in this paper. Upon such a subject it is obvious that no claim of originality can be got up.

suade myself of the entire reliability of these traditions, and, however reluctantly, feel compelled to seek the origin of the common public school on this side of the deluge, and even this side of the patriarchal times.

The world before the Christian era, indeed, had no form of school bearing any close resemblance to the common school of to-day, or of a hundred years ago. Whatever may be the *antiquity* of the Chinese system of education, or its form, it has had no influence in giving birth or form to our own.

GREECE.

Among the Grecian states both Sparta and Athens had schools partaking somewhat of a public character, but greatly unlike those of the present day. In Sparta the children belonged to the state, and not to their parents. They were regarded as so much raw material for the manufacture of human fighting-machines. Good soldiers were wanted, and the muscles and sinews of the boys were developed and exercised to produce such. The work was well done. The Spartan phalanx was an ugly thing for an enemy to encounter. But education, in our sense of the term, the Spartans did not have. They had no books, no literature, no sciences, no arts, but the art of war.

Athens had schools, literature, sciences, and arts. But her literary schools were established and supported by private individuals, and not by the state, They were, however, regulated and supervised, to a certain extent, by public authority. The teachers were amenable to the laws, and liable to punishment for teaching doctrines or practices contrary to the generally received and accepted tenets. Officers were appointed to watch over the schools and the habits and manners of the youth, but our common schools have not come, by any species of evolution, out of those of Athens.

ROME.

Rome had private schools of various forms and grades, which offered their advantages to such as were able, and disposed, to pay for them. But she had no system of public instruction, and no means, either public or private, for the education of the mass of her people. The truth of history compels the admission, that no nation or state, before the fall of the Roman empire, made any general, public provision for educating, even to the smallest extent, the children of all classes of the population.

CHRISTIANITY.

The common school is one of the products of Christianity.

It is a natural outgrowth of that system which introduced itself into the world by proclaiming the gladdest of tidings to the poor, humble, common people; and whose Founder sent his well-trained pupils to utter the grandest truths impartially in the ears of every living human being! Christianity, like its First Great Teacher, may to-day come to its own, and find no reception; but, nevertheless, the common school for the common people is its own. The children may seek to disown the mother, but the parentage cannot be denied.

The first Christian schools were probably catechetical and taught the doctrines and formulas of the Church. These were established very early in the history of Christianity. As soon as it had become a recognized and established faith, wherever a church was planted, a school of some form was immediately founded for the instruction of the children, especially of the poorer classes. The duty of giving some knowledge to the common people began, at this time, to be recognized and insisted on by the clergy.

In 529 a general council strongly recommended the establishment of village schools. "In 800 a synod at Mayence ordered that the parochial priests should have schools in the towns and villages, that the little children of all the faithful might learn letters from them. Let them receive and teach these with the utmost charity, that they themselves may shine as the stars for ever. Let them receive no remuneration from their scholars, unless what the parents through charity may voluntarily offer."

Socrates disputed and taught Athenian citizens without compensation. Christian teachers first opened free schools for the children of the poor. A council at Rome in 836, ordained three kinds of schools throughout Christendom: episcopal, located at some central, important places; parochial, in towns and villages; and others, wherever a place and an opportunity could be found.

"About the same time Lothaire I. ordered eight public schools to be established in some of the principal cities of Italy, in order that opportunity might be given to all of acquiring knowledge without repairing to remote places." A council in 1179 directed a school to be opened in every cathedral for the gratuitous instruction of the poor. In 1215 another council decreed "that in all cathedral churches, and others provided with adequate revenues, there should be established a school and a teacher by the bishop and the chapter, who should teach the clerks and other poor scholars gratis in grammar, and for this purpose a stipend should be assigned him."

In these and similar efforts the common school had its origin.

Those Christian schools were imperfect in organization—limited in range of studies—hindered in efficiency by poorly qualified teachers, and crippled for lack of sufficient means of support. Their progress and development were necessarily slow. During some whole centuries they were nearly worthless, but they were the best, and, indeed, the only means of education furnished to the children of the common people.

PERIOD OF THE REFORMATION.

At the era of the Reformation, so called, the cause of popular education received a new and powerful impulse. First the friends, and later the opponents of the great religious movement made vigorous efforts to increase both sacred and secular learning. Whatever opinions one may entertain of the religious character, influence and motives of Luther and the Jesuits, he can not honestly deny or belittle the value of their labors in the work of education. The common school, however, owes much more to Luther than to the Jesuits. Amid his other great activi-

ties he found time to do noble service for the children of the middle and poorer classes. In 1524 he wrote "an address to the common councils of all the cities of Germany in behalf of Christian schools," in which he said:

"I entreat you in God's behalf and that of the poor youth, not to think so lightly of this matter as many do. It is a grave and serious thing, affecting the interest of the kingdom of Christ, and of all the world, that we apply ourselves to the work of aiding and instructing the young. Even if the parents were qualified, and were also inclined to teach, they have so much else to do in their business and household affairs, that they can not find time to educate their children. Thus, there is a necessity that public teachers be provided. Otherwise each one would have to teach his own children, which would be, for the common people, too great a burden. Therefore, it becometh rulers and magistrates to use the greatest care and diligence in respect to the education of the young."

In a letter to the elector of Saxony he maintains that the government, "as the natural guardian of all the young, has the right to compel the people to support schools. What is necessary to the well-being of a state, that should be supplied by those who enjoy the privileges of such state." He advocated the application of the revenues of some of the cloisters and other religious establishments to the support of schools of various grades, so as to make them as nearly free as possible. He insisted that good schools for all the children should be opened in all the towns and villages.

The views of Luther touching the school question, in several particulars, are remarkably similar to what are denominated "the advance doctrines" of the present day. He would have the government establish schools for all the children. These schools were to be supported partly by funds and partly by taxation, and were to be controlled and supervised by public officers. The curriculum of studies, of course, conformed to the ideas of that age, and the qualifications of teachers were fixed by the possibilities of the times. In both respects great room remained for improvement.

In 1527 a thorough visitation of the schools of the electorate of Saxony was made by a large government commission, one of the results of which was the preparation of the "Saxon school system" by the joint labors of Luther and Melancthon.

Between the years 1550 and 1580 school laws were adopted in several of the German states, providing for the support, classification, and supervision of the public schools. The thirty years' war, which broke out in the early part of the seventeenth century, destroyed much of this educational work, and retarded the progress of the schools for a whole generation.

GERMAN REVIVAL.

In the latter part of the century a new and vigorous impetus was given to common school education by the zealous labors of a few eminent men, among whom were Philip J. Spener and Augustus Herman Franké. These were followed by others of equal merit in the first half of the eighteenth century, and in the latter half, among others, by

Henry Pestalozzi, whose life and labors are too well known to need even a word of explanation. During this period seminaries and normal schools for the instruction and training of teachers were established in nearly all the German states. Great interest and enthusiasm were created in favor of better systems and methods of instruction. What is known as the Prussian or German system of schools and instruction may be regarded as the present result of this grand movement in the interests of popular and common school education.

The fundamental principles of the system of primary public instruction as now organized in Germany, have been summed up by an able writer nearly as follows:

1. The *right* of the state to insist that all the children of the state *shall* receive a certain amount of instruction.

2. The *duty* of the state to provide, directly or indirectly, the means for securing this end—the education of all the people.

These means will include—

1. The establishment of a sufficient number of permanent schools, of different grades, and furnishing these schools with all necessary buildings, furniture, apparatus, etc.

2. Supplying the schools with a sufficient number of well-prepared teachers. This involves the necessity of sustaining normal and training schools.

3. Such means of supporting the schools that their advantages may be enjoyed by the very poorest classes of children.

4. An efficient system of examination, inspection and supervision, reaching every school and every teacher.

On the continent of Europe the humble beginnings of the early Christian teachers, and the earnest labors of the later reformers, and the recent enthusiastic efforts of self-denying men, have resulted in this excellent scheme of public instruction, the corner-stone of which is the common school for the common people.

A simple statement of the hours and general arrangements of the schools established upon Luther's plan will enable any one, by a comparison with those of the present time, to judge of the progress and development in respect to studies and some other matters.

"The languages took the precedence of all other studies. The forenoon session was two hours every day; the afternoon three, except Wednesdays and Saturdays, when only the musical exercise of one hour was held, as it was every other afternoon. The catechism was taught every Saturday afternoon."

"Thus, of the twenty-six school hours in the week, eighteen were devoted to the languages, six to music, and two to the subject of religion. There was, however, further provision made for the religious education of the pupils. They went to the village church or the public chapel every morning, at about five or six o'clock, sung hymns in Latin and German, and read the Scriptures and the catechism aloud, in Latin and then in German, and repeated prayers. They had similar evening service."

Besides this, the children were taught on the Sabbath a variety of religious truths, doctrines and forms by the regular teachers of the week.

SCOTLAND.

In this connection Scotland deserves honorable mention. She was among the earliest of the modern nations to establish and develop a system of parochial schools, though in recent times her schools have hardly sustained their early relative position in respect to efficiency and character. Two or three years after the first discovery of Columbus, the Scotch parliament enacted that all barons and substantial freeholders throughout the realm should send their children to the ordinary schools from the age of six to nine years, and then to higher seminaries to be instructed in the laws. The penalty for neglecting to comply with the provisions of this statute was a fine of £20. We have here an example of compulsory education a century and a quarter before the May Flower anchored at Plymouth. This enactment was not intended for the common people, but it was the first step toward the development of the Scottish school system. Progress, however, was slow,. John Knox and his associates were earnest advocates of education for the whole population, and gradually, during the 15th and 16th centuries, schools were opened in the more cultivated parts of the country. In 1695 it was ordered, by an act of parliament, that "a school be founded and a schoolmaster appointed in every parish." The schools were supported partly by public funds, and partly by fees paid by pupils. The fees and the salaries of the teachers were not extravagant. The supervision of the schools were vested in the various presbyteries, and they were instructed to see that the law was carried into effect. In 1705 ministers were ordered to see that *all* children were taught to read. Common school education made substantial progress under this law during the first and middle portions of the 18th century; but toward the close of the century a variety of causes contributed to sink the character, and to lessen the value of the parochial schools. Poorly qualified teachers were employed, supervision was neglected, attendance was irregular, and, in many places, a large part of the children of the poor grew up in utter ignorance.

About the first years of the present century a new interest in the education of the mass of the people sprung up, which has produced most beneficial results. Normal and training schools have been established. The great body of the Scotch children are receiving the elements of a common school education, and the general character of the Scotch people is a sufficient evidence of the value of such instruction. Complications, growing out of the relations of the state and the churches, in Scotland, as in some other countries, embarrass and hinder the harmonious development of the school system, and render progress, in some directions, very slow and uncertain.

AMERICA.

While the terrible thirty years' war was devastating the fields of Germany, and destroying her schools and school systems, sturdy men, moved by the same religious and intellectual impulse which had opened the doors of learning to the common people in Wurtemberg and Saxony, were planting schools and laying the foundations of our own system of

public education in the rocky soil of the Atlantic coast. As in the old world, so in the new, the common school is a product of Christianity. It grew out of the depth of Christian faith and the warmth of Christian love and the activity of Christian zeal. Hardly had the first rude cabins been erected, or the first acres been cleared of the primitive forests, when our fathers began to provide for the instruction of their children, and to lay the deep and strong foundations upon which the magnificent structure of our modern school systems has been built.

The first schools established were not, in the usual acceptation of the term, common public schools, but institutions of a somewhat different sort, out of which naturally the common school came forth. It is not quite settled between Massachusetts and Connecticut which colony made earliest provision for such a school, practically free, though it is conceded to have been of New England origin.

Massachusetts enacted a law, as early as 1647, "that every township, after the Lord hath increased them to the number of fifty householders, shall appoint one to teach *all* the children to read and write"; and when any town shall increase to the number of one hundred families, "they shall set up a Grammar School; the masters being able to instruct youth, so far as they may be fitted, for the University." How far were the men of Massachusetts, in 1647, behind the "most advanced views" of "leading educators" of some states to-day, touching the "relation of the University and the public schools"? It was provided that these schools should be supported by the parents and guardians of the children taught, or by a general tax upon the people of the township, as each locality might determine.

Governor Winthrop says, under date 1645, two years earlier than the enactment just mentioned, "Divers free schools were erected, as at Roxbury and at Boston, and other towns did the same, providing maintainance by several means." These schools were supported partly by public funds, derived from various sources, and partly by the tuition or rate bills of the scholars. They were not absolutely free, nor were they simply common or district schools. They embraced a wider and higher range of studies, including oftentimes the elements of Latin and Greek. From schools of this character, by a natural and gradual process, have been developed the various grades of the Massachusetts free school system.

The laws of the colony and the state, from the time of the first settlements, have required the towns to provide and sustain schools, and to see that all children were instructed to some extent, but no general, public fund for the support of schools was provided till a comparatively recent period; and the several townships were left free to make provision in such manner as they chose.

Connecticut claims, by township action, to have anticipated, by a year or two, the Bay State, in the establishment of such free schools as have already been described, or of schools entirely free to poor children. The freemen of Hartford, in 1643, voted "that the town shall pay for the schooling of the poor, and for all deficiencies." The spirit of this vote

was embodied in the legislation of that colony, and also of the other New England colonies.

A parochial school, under the management of the Dutch Church, was opened in New York in 1633, free to all children who chose to attend. It was, however, inferior in character to the free grammar schools of the more eastern colonies. The instruction only included the mere elements of reading, spelling, writing, and arithmetic. A few schools of this and of higher character were established by churches or private individuals in the larger towns during the colonial period; but nothing like a general public school system was provided until after the Revolution. Progress in the early years was slow. No efforts to establish free public schools were made in the other middle or in the southern colonies.

PROGRESS.

The general progress and condition of popular education toward the close of the seventeenth century in the country, are indicated by the replies of the governors of several colonies to inquiries addressed to them by the commissioners of foreign plantations in 1670.

The Governor of Connecticut said: "One-fourth of the annual revenue of the colony is laid out in maintaining free (common) schools for the education of our children." This was the answer of the eastern colonies.

Gov. Berkeley, of Virginia, replied: "I thank God there are no free schools nor printing [in the colony], and I hope we shall not have these hundred years." This answer is indicative of the condition and temper at that time of the section for which he spoke.

We have the status of the common schools about the year 1700. In the south, none; in the central colonies, few and poor; in the east a right public sentiment and good beginnings in theory, with moderate success and progress in practice. School houses partook of the architectural simplicity of the age, and the range of studies was generally limited and elementary. Few or no public funds for the support of schools.

DEVELOPMENT AND PROGRESS OF THE SYSTEM.

The history of common schools in the country during the eighteenth century presents few points of special interest. Their progress may be shown by a brief summary of their conditions and character about the year 1800. The Revolutionary War and the unsettled state of the country during the times immediately following, were unfavorable to the development and healthy growth of educational systems. Not much could be expected at such a period. The schools were poor and badly supported, and yet they were of great value.

THE EARLY NEW ENGLAND SYSTEM.

The substance and spirit of the New England school system, during the administration of the first President, have been summed up as follows:

I. The instruction of all the children in the rudiments of an English education, viz., reading, writing, the elements of arithmetic, geography, and grammar (of the last two usually but little). To secure this end

common schools were to be sustained in every district containing fifty or even a less number of householders.

II. Each district managed its own financial matters and local business, and employed its own teacher,—was practically independent.

III. Each township had a superintendent, board of visitors or general school committee, usually made up of professional men, including the clergy. These examined teachers, inspected schools, in some cases prescribed text-books, etc.

IV. The schools were supported by taxation and by rate-bills, the children of the poor being admitted free.

V. The authorities had usually power to compel the attendance of children upon the schools, if parents or guardians failed or neglected to send them.

This is a brief outline of the common-school system in the most favored parts of the country. There were no general state funds for the support of schools. There were no normal schools or other special means of preparing teachers for their work. There were very few books or periodicals treating, in any special way, upon the subject of education. There was no general interest or enthusiasm in respect to the work of education. In many sections the schoolhouses were of the poorest sort, the course of studies very limited, and the teaching exceedingly defective. The condition of the schools in all these respects is vividly set forth in descriptions of "the common school as it was." Some of these descriptions are without doubt exaggerations, and others approach very near the border line of caricature. A truthful picture evidently contains shades enough.

SCHOOL BOOKS.

The author of Webster's Dictionary says: "When I was young, the books used were chiefly or wholly Dilworth's Spelling Books, the Psalter, Testament, and Bible." This statement includes only two books, the Bible and spelling-book. No geography was studied until the publication of Dr. Morse's small books about 1786 or 1787. No history was read or studied. Excepting the Bible, no reading book was used until the publication of Webster's Third Part, so-called, in 1785. No slates were used till several years after the Revolution, and no book upon arithmetic. The teacher "gave out the sums", and pupils went through the operations on paper or on *birch-bark*. Generally no grammar was taught.

SCHOOL HOUSES.

Dr. Hemen Humphrey says, in respect to schoolhouses and accommodations, at a little later period than that of which Dr. Webster speaks, "The first school I remember was kept in a barn." The next in a neighbor's house. The first school I kept myself was in a room next the kitchen in a small private house. Most of the districts had houses, but they were rather juvenile penitentiaries than attractive accommodations for study." They were small, lone, and square, with a large fireplace on the side next the door; stood, uninclosed and unpainted, near the road, with no sort of outbuildings.

STUDIES.

"The branches taught were reading, spelling, and writing", very little arithmetic, less geography, and still less of grammar. Spelling was the leading exercise. About this time Webster's spelling-book was introduced into the schools, and Dilworth's arithmetic, followed by Daboll's which held its place, in many schools, for long years. Occasionally Webster's or Murray's grammar began to find its way into the schoolroom, and a few copies of Morse's or Dwight's geography.

AS TO THE GIRLS.

In these schools generally the boys and girls had equal advantages,—the boys attending more in the winter, and the girls in the summer. There were usually no distinctions in respect to sex, in privileges and accommodations, either inside or outside the schoolhouses. In some parts of the country, however, it was not deemed necessary, by the parents, that their daughters should be taught arithmetic, as it could be of little or no use to them. All they needed to know, of school learning, was how to read, write, and spell.

An outline of the development and progress of educational opportunities and advantages in public schools for girls and young ladies, above the merest elements of knowledge, would require a separate paper. Space will allow here only a very few borrowed and condensed statements. As late as 1700, girls schools in Germany were mostly kept by ignorant old women. Soon after that date a few higher and better schools were opened to them. In this country until near 1800, girls were seldom taught arithmetic. At New Haven, in 1789, a class of young ladies were instructed in arithmetic, geography, and composition. A class of ladies could parse English at Philadelphia in 1780. The first academy for girls was opened in New England in 1789. In Boston, in 1784, girls were only admitted to what were called writing-schools, kept between the forenoon and afternoon sessions by the teachers of the public schools. In 1789 girls were allowed to attend some of the reading schools on an equality with boys for six months in the year, the girls going in the morning and the boys in the afternoon. In 1825 an experimental high school for girls was established in Boston, which was discontinued after two or three years, and was not reëstablished for twenty years or more. At this time female teachers were employed only in the lowest grades of primary schools, and usually only during the summer months, at about the same rate of wages as they would have received in the farmers' kitchens. To-day all this is changed, but the progress of change we can not pause to trace. The result is everywhere recognized.

THE COMMON-SCHOOL REVIVAL.

The opening years of the present century found the public schools in the condition described, in respect to houses, books, studies, teachers, and means of support. Early in the century, as early as 1815 or 1820, commenced what has appropriately been termed "The Common School Revival"—a revival which has grown in strength and influence, with occasional seasons of relapse, during fifty years.

It is not my purpose to notice the eminent men who earlier or later have been efficient and earnest laborers in this grand work, but rather briefly to call attention to the fruits of their efforts—the present condition of our schools and school systems. We shall in this way gain some tolerably clear conception of the development and progress of the last half century.

This progress may be observed in several directions, which will be indicated without regard to the order of relative importance.

I. In respect to schoolhouses and school accommodations, the progress in this direction is everywhere so obvious that words are unnecessary. Place the log cabin beside the brown-stone or marble front, and the evidence is complete. The small, low, unsightly, unpainted, unshaded, deformities have not all disappeared, but those not gone are going before the advance of a right public sentiment, and the teachings of a correct public taste, and the demands of our common humanity. A memory which ranges over thirty or forty years can recall the toilsome but steady steps of progress along this part of the educational line.

II. In respect to the branches of study taught, place reading, spelling, and writing, with a little of arithmetic, beside the crowded courses of to-day, and the comparison will show the enlargement and progress here. Whether we are in danger of going too far in this direction, and are endeavoring to introduce too many things, are open questions of much importance, but are not now under discussion. There is a time and place, no doubt, for everything, but the schoolhouse and school time will not contain everything.

III. In respect to text-books and apparatus. On the one side, the spelling-book, Bible, New England primer, Daboll's arithmetic, with possibly Morse's geography, and Webster's or Murray's grammar, and a "third part", constituted an outfit for a whole school course. Count up, if one can, the necessary books for a present common-school course, and the point which progress has reached, in this direction, will be apparent, both in respect to number, style, and general character.

IV. In respect to the teaching and the character of the instruction given. It would hardly be evidence of progress in modesty and good taste to place the teachers of fifty years ago, and of to-day, side by side, and then congratulate ourselves on the superiority of our co-laborers, if not on our own. The true test is found in results. "By their fruits shall ye know them." Do better manhood and womanhood come forth from the elegant schoolrooms of our days than from the rude huts of our predecessors?

V. And this naturally leads to a comparison of the means enjoyed by teachers of preparing for their work half a century ago or twenty-five years ago, and at the present time.

NORMAL SCHOOLS.

The first normal school in the United States was opened thirty-four years ago to-day (July 3, 1839), at Lexington, Massachusetts. Just about a hundred years earlier, the first school of the kind was established in Germany. Twenty-nine years before, the first one was opened in

France. Twenty-three years before, the first in Holland. The school at Lexington was afterward removed to Framingham, where it is still flourishing. It cost twenty-five years of effort and discussion to secure the establishment of this first normal school, and the best exertions of such men as Prof. Olmstead, Gov. De Witt Clinton, J. G. Carter, Thomas H. Gallaudet, Emerson, Woodbridge, Brooks, Russell, Mann, and many others. Edmund Dwight and the state of Massachusetts each gave $10,000 to put it in operation. Two others were soon opened in Massachusetts, chiefly at the expense of the state.

Next to Massachusetts, New York established the normal school at Albany, the fourth in the country, in 1844. It opened with twenty-nine pupils. One was opened in Connecticut in 1849 or 1850; one at Toronto, C. W., in 1847. The Michigan normal school was opened in 1853. Others were established in different states very soon afterward.

There are now in the United States about 120 normal schools of various grades, and the number is constantly increasing. Thirty-five years since not one existed. Progress, within that time, has been remarkably rapid.

TEACHERS' INSTITUTES.

Teachers' institutes take rank next to normal schools among the means of preparation for professional work. It is stated that the first institute was organized in Boston, in 1834, for "instruction in the methods of teaching music." The first institute for the benefit of teachers in public shools was held in Hartford in 1839—as to this statement there is some dispute. They were established in New York in 1843, and in 1847 the Legislature made an appropriation of funds for their support. They are now among the recognized necessities of the public school system.

Other means of professional study and preparation are so well known as to require no remark, but they are all of very recent growth. Books, lectures, associations, journals, and papers of different sorts and varying values, abound.

If teachers of to-day are not prepared to give better instruction than those of five-and-twenty years ago, they are open to severe criticism and worthy of sharp reproof. With better houses, better apparatus, better books, better means of preparation, and better means of all sorts, the work done ought to be of a better quality.

VI. In respect to means of support and encouragement. Nearly all the states have now constitutional provisions requiring the establishment and support of common schools, or recognizing their value and importance. In this direction, during the last few decades of years, progress has been very marked and satisfactory. The United States Government, directly or indirectly, has given and is giving efficient aid to the work of education among the mass of the people. Large grants of public lands are made for this purpose. An ordinance of the Congress of the Confederation in 1785, re-affirmed in 1787, set apart "section sixteenth of every township for the support of public schools."

Between sixty-five and seventy millions of acres have been granted for common schools, besides eight or ten millions for higher institutions

of learning. Where not wasted, or lost by bad management, the proceeds of these magnificent grants have been used to form permanent school funds.

Several of the states have large permanent primary or public school funds, the income of which is annually appropriated to the object for which they have been created. Massachusetts and Connecticut have each a fund of two million dollars; New York, three million; Michigan, nearly three; Illinois, six; Indiana, eight; Iowa, three; Ohio, nearly four; Wisconsin, Minnesota, and Mississippi, each two. Some other states have smaller funds, and a few have none. The income of these funds, properly distributed, stimulates local taxation for school purposes, and thus affords both direct and indirect support to the schools.

As a result of these ample provisions, the common schools, in many of the states, are now entirely free. Rate-bills and other similar hinderances to the education of the very poorest children have disappeared. That stage of progress has nearly been reached when the common school offers its advantages, "without money and without price", to every race and color and condition.

PRESENT CHARACTERISTICS.

The general characteristics of our present school systems, disregarding minor and local differences, are essentially the following, which compared with those of fifty or seventy years ago, will present the most prominent points of development and progress.

1. A district or common school wherever there are children to be educated.

2. A system of graded schools in every town or city of any considerable size, including a grammar or high school.

3. The constant supervision of the schools by one or more efficient visitors or superintendents, authorized to examine and determine the qualifications of teachers.

4. The enforcement of regularity of attendance by public sentiment, or by law, and the regulation and supply of proper text-books and other means of study and illustration.

5. The construction of good houses, with all necessary conveniences.

6. The establishment of normal schools, and other means for the professional education of teachers.

7. The support of these schools by the income of public funds and by general taxation, so that they shall be practically free to all classes of children.

8. A constant effort to improve the schools in all respects.

DISCUSSION OF PROF. PUTNAM'S PAPER.

Prof. E. Olney, of the University of Michigan: We have been taken around the goodly temple, have been shown its broad and deep foundations, its magnificent area; we have been called on to admire its structure, and count its towers. What you want of me, I suppose, is simply

to set the door ajar, and ask you to go in and see what spirit reigns there. But I must beg a little personal indulgence before doing it, while I express the satisfaction it gives me to look an audience of Ohio teachers again in the face. I was born in New York, and now live in Michigan, and yet I claim to be a Buckeye. The fact is, I was born as a teacher, my second birth, in Ohio. Your household gods are familiar to me. I knew and loved your noble Lorin Andrews, and I have been better all these years for having known and loved him. I caught my first inspiration as a teacher from your Lords, Smyths, Freeses, Lynches, Harveys, DeWolfs, some of whom, thank God, remain to this present day. And memory has been very busy, I assure you, these two days since my return to you. I have been living over again my teacher childhood, as we live over our natural childhood. Sometimes in those brief visits to that hallowed spot we still call home, I have gone again across the prairie with father, when a boy eighteen years old, I went to teach my first district school in the old log schoolhouse, for four months at $50 and "board around." Ah, that boarding around was a peculiar institution! Do you have it yet in Ohio? I suppose you have forgotten it, but I have not. It did not succeed very well with me—there was not much "around" to it. I believe that is generally the way. Well, I have kept you a good while on the door-step. We have seen what a grand complex school system we have—wheels within wheels—but is it intelligent with eyes? Is it strong in every part to execute? Is it warm with the internal, heavenly fire? In short, my friends, what has been our history as teachers? We have better opportunities, larger facilities, than former generations of teachers: are we better than they? We certainly ought to be. I do not raise this question in disparagement. I am not one of your croakers who think the world is going to ruin. I believe in the millenium, the good time coming. It is coming. The world does move. I doubt not the teachers of to-day are better and more efficient than those of any former generation. But the points I would like to hear you discuss are somewhat of this character: Wherein has valuable improvement been made? What attempts have been failures? Have we in anything retrograded? Have we kept up a symmetrical growth? Are we wiser than former teachers in our methods? Certainly our methods are different. What have we gained that they had not? What have we lost that they had? I am to ask questions; that is what I am here for. You are to answer them. In what respect have we made advance? Do we understand better the philosophy of teaching, the laws which govern mind in the reception of truth? Have we by observation and by reasoning upon these laws, developed better processes than they practiced intuitively? Reasoning at every step, have we mistaken our way or kept it? Is there anything in the history of the past to teach us whether our progress is in the right direction, and what dangers are? Do we value—and I do wish some of you would tell me this—do we value more than they did *the personal power and influence of the teacher?* Do we know better than they that the ultimate, the all-comprehending thing is, as the professor has said, the manhood and the womanhood that is in the teacher?—for this only can produce its like. Knowledge

of the laws of mind, of literature and science, skill in methods, wise laws, and multiplicity of appliances are only the hands with which we do our work, but the moulding, the guiding, the all-comprehending, the only true force, is the soul of the teacher? Do we know this better than our fathers did? I believe I should answer most of these questions in the affirmative. I think we do make progress in these respects. I think the teachers of to-day taken as a whole, are a power above that which any other age has seen. I can only look back a life-time, but I can see progress not only in more numerous and better appliances, and in a better understanding of the laws of teaching, but also in the estimate placed upon the character of the men or women who are to be put in charge of our schools. I see this not only in the inquiries of school boards and school officers, but I hear it from almost every platform. I can do no better service than to commend to those who may not have read it, that most magnificent address of Dr. Mayo at Boston last summer, to which we listened with such rapt attention during that hot evening. I commend that address on the personal power of the teacher, to your careful, earnest reading. Take it for my speech, if you please!

I wish to ask one question further. They had not many books in former days, but what they did have they learned from cover to cover. We have a great many books. Can we say the rest of it, that what we have we learn? I am afraid not. How well we remember the few choice books upon the shelves of our fathers at home! We read those standard old works because father and mother read them, and there was nothing else to read. We could see there were depths there which we could not fathom, and we were incited to sink our plummet a little deeper. There was the place where men and women got their intellectual and spiritual food. Dwight's Theology and Fuller's Essays would now be thought rather dull reading for a child; nevertheless, we read such books, and they gave us profit. Is there not a little danger in the direction of too many books? We sometimes hear it said, "Away with all the books!" I think this is in the same direction as the danger that brings in such a multiplicity of books. I have no respect for this clamor, "Away with the text-books; depend upon oral instruction." I belive that with all the books we have now, we are in danger of undervaluing them. They did not undervalue them in other days. We talk, my friends, about self-made men and self-made women. There are no such men and women. These men and women who have come to occupy high places without the advantages of the schools, are book-made. Books have been their teachers, the very best of teachers. Set a young boy or girl on fire with a passion for good books, and I will guarantee the rest of the course. [Applause.] Beget in the young a taste for good books, and teach them how to study them, and they can become educated men and women. But let a child depend on the inspiration, the stimulus of the living teacher before he can study, and it will be a drudgery for him to sit down, and by the lamp-light master the contents of a musty book. He must have the inspiring presence of the living teacher before he can think. He is fed on stimulants, and will die of the dyspepsia before he is forty. Let the foundations be rather

laid in the other way. Let the young know that the treasures of thought, both of the present and the past, are in these books. Let them learn to mine there, and they will dig in a mine that is rich and inexhaustible.

DR. J. B. THOMPSON, of New York: I do not rise to ask the privilege of making a speech, but to correct what I believe to be a historical mistake in regard to the history of education. I want exactitude in matters of history. I have been greatly enlightened and delighted with the lecture, but there is one point on which I beg leave to enter my dissent, and that is with regard to the origin of institutes. I am aware the historian has given the account as stated by my friend, Dr. Barnard, who has claimed to be the originator of teachers' institutes. Connecticut is my second home and Dr. Barnard my personal friend, but I think his claim is not well founded. In the Spring of 1843, Mr. J. S. Denham, of Ithica, New York, who has a personal friend here, collected together the teachers of his county—he was then county commissioner or superintendent, as it was called—and kept them together ten or twelve days. Early in the autumn of 1843, the county of Cayuga, under the superintendence of E. G. Storke, a second institute was appointed at Auburn, and I had the honor of doing the mathematical work on the occasion. I therefore claim to be personally acquainted with those two institutes, the first in the state of New York. The third was at Ithica, under the superintendence of J. S. Denham, where there was a regular training course for two weeks. We had at Auburn 200 young men, from the region round about, and a more intensely interested body of teachers I never saw. I was in Connecticut and New York alternately; but we heard nothing of teachers' institutes in Connecticut. About 1844, I think, my friend Dr. Barnard invited me to attend a teachers' institute under his supervision: and in 1845 he sent for me to come to Providence, where he resided, to attend a teachers' institute there. I have had the pleasure of meeting here a gentleman who attended that institute. I think it was in 1845. Now, Sir, when we come together here to discuss topics of education, for one day or two days, you do not call it a teachers' institute. It is a convention. Dr. Barnard called together the teachers, and a few came, and staid, I think, one day. They talked over educational matters. I am not quite sure but they staid two days, but I think not but one. They did not go through the exercises common to teachers' institutes. Now, then, where is the propriety of calling a convention, or such a meeting, a teachers' institute. I hold it to be a misnomer. I wish to enter my protest against withdrawing from the state of New York the honor of establishing real teachers' institutes. Now, Sir, while I am up I would like to answer one question of my friend who prceded me —whether there is not danger of flooding the country with two many books. It depends on the quality of the books. The more we can have of such books as those recently issued by my friend the better. He alluded to one other subject which I would like to advert to—his personal experience in keeping school four months for $50 and "boarding around." I can beat him. I kept school three months for $24, and boarded around. But my experience was happier than his.

I taught in the good old Yankee land, and lived upon the fat of the land. A little girl came in one evening where I was boarding—the last day—and, very much out of breath, ran up to the landlady and with much earnestness said: "Mamma wants to borrow two weights of hog's tallow, for the schoolmaster is coming to board to-morrow!" Now, Sir, that simple expression from that honest, simple-hearted child, speaks volumes as to the quality of our board. I can say that the schoolmaster who boarded around, lived upon the *fat* of the land. (Laughter.)

WHAT SHALL CONSTITUTE A PROPER COURSE OF INSTRUCTION AND PRACTICE FOR TEACHERS.

BY WILLIAM MITCHELL, WORTHINGTON, OHIO.

Natural ability and proper preparation are the factors of possible success in any calling in life. If to these are added favorable circumstances and proper zeal, success becomes certain. What shall constitute this proper preparation depends greatly, if not entirely, upon the character of the calling. What this shall be, or as our topic has it, what shall constitute a proper course of instruction and practice for the teacher, depends upon the kind of work he is required to perform.

Of this work we shall reach a correct general notion, if we consider just what the material is upon which he operates. Is it silver, gold, wood, hay, stubble? It is the child, the youth, the most impressible of all God's living world, at its most impressible period.

His physical organization, with its future of strength, enjoyment and good old age, or of weakness, pain and premature decay, is committed to the teacher's keeping. Ventilation, exercise, position, care, upon which in so great a measure bodily welfare depends, are under his control for a great part of each day.

The intellect of the child, with its immortal capabilities which under a master hand grow into powers of reasoning and creating second only to his Maker's, or, misguided and neglected, are more groveling and earthy than instinct, is so made his special charge that under his guidance it may develop into the highest genius, or its nobleness may be so stifled as to make it the slave of appetite and passion.

The moral nature, with its quick conscience, its sense of duty, and its peerless will, the teacher may invest with its royal prerogative of command over the entire man, or, by pernicious precept, and more pernicious example, he may bind captive to the triumphal car of selfishness and lust.

Yes, the child, the youth, with his manifold nature so marvelously mixed, that the same precept, principle, or act, may produce excellence or ruin, physical, mental, or moral, is committed to the watch-care and placed in the power of the teacher.

Secondly. To what end? That he may be educated, which implies

not merely that he may be taught to read and write, and keep accounts, but that he may learn what to read, what to write, how to make accounts, how to think, to act, to live, how to impress that life upon the world. Not merely that he may receive, but that he may acquire; not that the superior wisdom of the teacher may furnish his receptive mind with the necessary modicum of knowledge, utilitarian or ornamental, but that under the teacher's training he may put on his own strength; that under the teacher's control he may acquire the power of self-control; that he may come to the possession of such disciplined faculties in himself, as to make his inheritance in the common power, wisdom and beauty of the universe about him, yield him a hundred fold in this world, and in the world to come life everlasting.

Thirdly. What are the means or instrumentalities at the command of the teacher for the accomplishment of this work. Mainly the exercises and studies of the schoolroom, the instruction and training he can there impart, with such outside observation and investigation as are suggested or required by the schoolroom exercises. In all these the living teacher, by the interest he awakens, the zeal he inspires, the direction and encouragement he gives, the personal power he exercises, must be the main spring.

Operating then upon *what* he does to the *end* he has in view, and by the means he employs, it is apparent to what extent the causes of success or failure in this education must be sought for in the teacher himself, in his inborn ability and fitness, his judicious and thorough preparation, and his earnestness and dedication to his work. His vocation, viewed in its proper light, is not one which requires mere correctness of eye, skill and dexterity of hand, and strength of muscle. His task is not something which, being often done, can be done automatically, as a tailor takes a stitch, or the cobbler drives a peg. It is not a trade. It is rather the outgrowth of a profound philosophy, the philosophy of the human mind or soul—of their development and culture. It has its fundamental principles, as has the law. It has its scientific principles, drawn from experiment and observation, as has the science of medicine. It is a profession. Its true nature, and the estimation in which it is held by the world, may be gathered as well from the outside views of extremists, as from the practical opinion of those who hold the safe and golden mean. Some of these regard it as purely a theory whose applications to the education of the child are so obvious, that the best methods in instruction and training can without experiment be inferred and practiced, and that with a proper comprehension of its principles, success is certain and failure impossible. On the other extreme, some have considered it a work for which certain persons have, as it is expressed, a *knack*, by which word they crudely express natural fitness. And yet they think it a business in which, with or without this knack, any one who is scholar enough, with the proper amount of experience, will certainly succeed, thus holding it to be, save a small concession to natural fitness, a matter of routine, of method, to be learned by practice alone. The visionary and impracticable character of the first estimate, and the narrow and contracted view of the second, show them both to be erro-

neous. The truth is, the vocation of the educator is a profession, founded upon a philosophy, a system of fundamental truth, of elementary principles, which, with the inferences and deductions therefrom, sanctioned by reason and confirmed by experience, constitute a theory, a science of pedagogics, as real in its existence and character as the science of law, medicine, or theology; furthermore, that, based upon this science, as the concrete application of its truth, there are processes and methods, just and true, in accordance with which, when specially modified and individually applied, the development, the instruction, and the culture of the child are attained, as in law, has its methods of proof, of trial, of the transaction of business, judicial and executive, as medicine has its practice. In other words, there is an art of teaching. It may be remarked here that the mere scholastic attainments, of the teacher, his penmanship, his arithmetic, his chemistry, his Latin, while essential prerequisites to his entering upon his profession, form no more essential part of his professional knowledge than they do that of the doctor or lawyer.

The necessary inference, then, is, if *teaching* be a *profession*, an *art*, the proper course of preparation, of instruction and practice for the teacher, must be *professional*, and artistic, practical, and methodic; and that a knowledge of grammar, algebra, physics, etc., will no more complete his preparation to teach, than a knowledge of botany and chemistry will fit the physician to cure.

What shall this preparation then include? But first what should be the acquired qualifications of the candidate for entering upon this course of preparation and study? As in the case of the law or medical student, his knowledge of the different branches, reading, spelling, arithmetic, geography, history, the natural sciences, higher mathematics, more or less of the ancient and modern languages, should be thorough, practical, and, if you please, critical, if for no additional reasons, still for the common reason that these make him, in the general acceptation of the term, the scholar, and for the most obvious reason that he can teach only that which he knows, when he shall have reached the estate of the teacher. Through the study of these, also, the mind acquires that development and discipline which give it the ability, the power, and the breadth of culture needed for the vigorous prosecution of professional study,—as the lawyer studies his Greek, not for the Greek he finds in the law, but for the mental discipline he finds in the Greek.

The teacher should, in addition, have a training or skill in branches, more manual, as penmanship, drawing, manipulation, which have, besides what they possess in common with other branches, their special value in illustration. All these being understood, not only separately, but in their various relations to each other, and their applications to the facts and business of every day life, our prospective teacher may enter upon the special or professional preparation for the vocation of his choice.

While the science of education, or, as it is more commonly called, the theory of teaching, and the art or practice of teaching are and must be blended, both in study and use, we may, for our present purposes, con-

sider them separately. The legal profession has its law of evidence, of contracts, of agency, etc.; the medical profession, its anatomy and physiology, its therapeutics, etc.; similarly, departments may be found in pedagogics. Let us consider some of these. First the student in pedagogics must study the child. He must know enough of anatomy to understand practically its physiology, and enough of both for all hygienic purposes. He must understand how, by correct position and proper physical exercises, gymnastic and calisthenic, grace of movement and strength and vigor of body are to be secured. He must know what plays and games are healthful and safe. The organs of special sense, the eye, the ear, are to be trained, kept in health, and protected from injury; the appetite is to be guarded, improper food and excess in eating and drinking to be avoided. In short, he must know all that the bodily welfare of the child requires,—not that, like the physician, he may cure, but that he may develop, protect, and preserve.

Again, most manifestly must he study, carefully and minutely, the mind, its faculties and habits, its peculiarities and eccentricities. He must know the conditions and the laws of its action; the manner and order of development and growth; the kind and quantity of knowledge it seeks, and which is its proper stimulus; the mode of strengthening its weaker powers, of utilizing its energies, and checking its abnormal tendencies. He must not neglect the sensibilities. The elements of the child's emotional nature, the conditions of æsthetic culture, invite special attention by their interesting character, and demand it by their importance. The true and delicate taste, the love and appreciation of the beautiful, are as legitimate objects of education, as correctness of judgment and power of reasoning.

Again, with the child's moral nature the teacher has to do most directly. In the government and management of the school, in the control of the conduct of each pupil, questions of right and wrong are to be met most squarely. The incentives and motives, which now are the springs of action in the doing of school work, in the getting of lessons, in the strife for excellence, are made more potent by being appealed to, and relied upon daily; they grow with the child's growth and crystallize with his years, until they come to constitute the moral character of the man, benevolent or avaricious ambitions, or unselfish, prompting to the beneficence of a Peabody, or the back salary steal of a Congressman. Conscience, duty, morality, and the high sanctions upon which they depend, can no more be excluded from the schoolroom than from any other sphere where responsibility attaches to human action, and deeds owe their character to intentions. Religion and theology may be left to be taught in the theological seminary; but the teacher's preparation must include all that will best fit him to work where the web of life is woven with intellectual warp and moral woof. The child, then, as the subject of physical, intellectual, and moral education and culture, the teacher must study to know altogether.

In the second place, the science of education includes the knowledge of the adaptation of means to ends, the special and economic value of the different studies and exercises in the discipline and growth of the

several faculties and powers above considered. These studies and exercises, as we have seen, are the instrumentalities in the hand of the teacher and, under his guidance, in the hands of the pupils, through which knowledge is acquired, power is gained and directed, and the child grows into the man. It is apparent to any one that different departments and branches of study call into action and, to a great extent, depend upon different faculties. Spelling, history, and geography exercise and greatly depend upon the memory, logic and mathematics other powers, and the natural sciences still other powers of the mind; while linguistic study may be said to differ from all the rest in this respect. The preferences of pupils for different branches, and their success or failure in their prosecution, doubtless depend much upon whether the retentive memory, the accurate perception, the vivid imagination, or their opposites, make of these studies a delight or a task. One pupil, owing to peculiar mental constitution, will receive the most general benefit, or reach the highest excellence through one line of thought and study, and another, for the same reason, through another:—as, for physical reasons, one person enjoys best health and performs most labor in a certain climate with a certain diet and in a certain employment, in all which respects another may differ from him. What are the general needs of the school, the special needs of the individual, and what kind and with what arrangement of work these needs are to be supplied, the teacher must understand from his own investigation and the experience as educators, if he would economize labor and time, and realize the highest success. His own preferences can not be safely followed here. His own experience, as a pupil, may be a guide still less safe. Systems of education and courses of study must be examined in the light of results as well as of reason. Trial and actual experiment may lead to facts and conclusions almost as unexpected to the teacher as to the physician. To illustrate: Will the study of Latin accomplish all, or more than all claimed for it? Should it be begun before, with, or after the study of English grammar? Should all pupils of the proper grade be required to study it? Hundreds of such questions are forced upon the attention of the educator; he may not settle them, but he must decide his own course.

Thirdly. The teacher's preparation should include the critical study and thorough review of the several branches to be taught in a professional way, and from the teacher's standpoint. This is a very different thing from the study of these branches by the student who has in view no professional use of them, but aims at the scholar's mastery of them. For example, the pupil in arithmetic is satisfied with a comprehension of the principles and the most practical application of those principles, through processes and rules, to business computations. The teacher can not stop here; he must know the order in which the several subjects and operations can be most advantageously taken up and taught, the most natural and thorough manner of developing the several lessons and principles, and, if illustrating difficult points, the most useful applications to business, and the most successful plans for drill and review; then, and then only, is he able to teach arithmetic properly, either for the sake of its direct business use, or for the sake of the thought-power which its

study can develop. What is true of this branch, is true of all. Academic instruction may fit him to pass the ordeal of an examination by a board of ministers and lawyers, and thus place him in the schoolroom as it would a candidate for a clerkship in the civil service; it can not prepare him for the discharge of his duty when there. The professional instruction and training must differ as widely from that of the academic or college class, as instruction in pharmacy does from that in botany or chemistry.

Fourthly. The teacher's course of instruction and preparation should include the study of methods in the management, instruction, and government of schools. By methods we are to understand the general or special ways or modes of doing the work of the schoolroom, deduced from and based upon the principles of education and culture, as the phonic method of teaching primary reading, the topic method of conducting a recitation, the method of self-reporting for the control of a school. Whatever may be said of blind automatic and mechanical adherence to prescribed methods, which results in narrowing the views, checking the growth, and cramping the energies of the teacher, or the other extreme of aimless vacillation and experiment, all must admit that the teacher should be conversant with all the methods which have any respectable sanction, in their working details, with the arguments and considerations for and against them, and the experience of those who approve or condemn them. The credulous and superficial will follow them without a question; the bigoted and opinionated will reject them without examination: each course is equally subversive of true progress. No practitioner in medicine can afford, in this age of scientific advancement, when every substance and force in nature is laid under tribute to the healing art, to confine himself to bleeding and blistering, to calomel, sweats, or sugar pellets, as of old. It would be equally disastrous to his patients, should he test upon them every new treatment which may be advocated or published. As a guard against the mistakes of either extreme, he must be thoroughly posted in all that science, skill, and experience, in his day, are bringing to the attention of the physician, So with the teacher. Master minds and hands are thinking out and working out patiently, in different directions and under widely differing circumstances, the problems as well as the theorems of education and culture, and, if he would maintain his place in the ranks, he must both make his own contributions to the common stock of professional knowledge and take advantage of the experience of others. Those who most readily fall into either of the extremes to which we have alluded, do so because they know too little, not too much of methods. The teacher, then, must study methods, general and special, in books, by observation in the schools. What use he shall make of the knowledge thus gained, it is not within the scope of this paper to discuss. In the light of his observation and reading, he will be able to examine and discard, without the cost of a personal trial, many a specious method; he will be able, on the other hand, to bring forth from the same treasury things new and old, and mingle them to suit existing circumstances.

We come to consider the second division of our topic, What shall constitute the proper course of practice for the teacher? We might answer, in a general way, practice upon the same material with which he must deal when he shall have entered upon his actual duties, and with the same means and instrumentalities, with the assistance and under the direction of those competent to assist and direct. But let us endeavor to be more specific. And here, lest we be misunderstood, we remark again, that practice is mostly, if not universally, to be blended with instruction in principles and theory; the one is the means of illustrating, applying, and fixing the other,—in fact, the end to which the other is the means.

First, then, the prospective teacher should be trained in the handling of illustrative material, apparatus, charts, maps, diagrams, objects, etc. Sketching and drawing, as aids in illustration and explanation, are almost, if not entirely, indispensable to the teacher, and his practice in them should be such as will enable him to bring before the eye what can be very imperfectly addressed to the ear. This should be done, in the first instance, privately, or in the presence of the members of a teacher's class, subject to their kind but searching criticism, and under the direction of the proper instructor; afterward it should be given before and to a class of pupils and an entire school, with the same subsequent examination and criticism.

Secondly, after the proper instruction and observation in the manner of conducting exercises and recitations by the instructor and the more advanced members of the teacher's class, our candidate should take charge of the exercise or recitation, and conduct it, subject to the same subsequent discussion and criticism from his fellows and his instructor as before mentioned.

And, lastly, let him be entrusted with the instruction and control of an entire school, under the special or general direction of the instructor or superintendent, and such assistance, advice, and encouragement as may be needed; in fine, let him be led through the actual performance of his work and the actual discharge of his duties with the help of the master hand more and more withdrawn, as skill, judgment, and self-reliance are developed to the ability, intelligently and individually, to do the work of the teacher.

If with this he give promise of success,—if his investigation and study of the philosophy and science of his profession give him that comprehension of its extent and capabilities, and that breadth of culture which will elevate him above the dreary routine of the artisan into the higher sphere of the profound thinker and true artist,—if his love for and devotion to his chosen work inspire in him that conscientious earnestness which is an essential to success,—let him go forth to his labor in the fields white already to the harvest; if otherwise, let him seek some other vocation, in which, if he accomplish less good, he will, at least, do less harm. Let him have no part or lot in this matter.

Let us sum up briefly. The requirements for entering upon this course of instruction and practice, should be that scholarship embraced in the thorough knowledge of the branches which make up the cours

of study in a liberal education, and that mental discipline and culture which result from the thorough prosecution of such a course.

The theoretic or scientific part of the teacher's professional course should include the study—

1st. Of physiology and its kindred branches, in and with their practical relations and use in the physical development and culture of the pupil; of that mental science which will give him to understand the character, order or manner of growth, and conditions, and methods, of the culture of the powers of the mind, as intellect, sensibility, and will; and of that moral philosophy which will enable him to meet the demands which pupils possessed of a moral nature will be sure to make upon him.

2d. Of the adaptation of the instrumentalities at his command for the accomplishment of the desired end; the actual and educational value of the several departments or branches of study, and the best and most practical arrangement of the child's school work.

3d. Of the professional study or review of the branches to be taught —that is, with reference to the order of development, manner of illustration, application, drill, and review.

4th. Of methods and plans, general and special, for the instruction, management and government of pupils and schools.

The course of practice to consist—

1st. Of exercise and training in the use of apparatus and material for illustration and study; of maps, charts, diagrams, &c.

2d. Of conducting exercises and recitations of pupils in presence of instructor and fellow-pupil teachers.

3d. In the management and instruction of schools for longer or shorter periods of time, under the direction and watch-care of the proper instructor.

This course of theoretical instruction to be pursued through the use of professional works, and by means of lessons, lectures, discussions, theses, drills, etc., and proficiency in it to be tested by thorough examination.

The opportunities for practice to be furnished by practice and model schools. The institution which shall furnish the facilities for all this to be the normal school. Such a school, in its true sense and office, is as strictly professional for the teacher, as is the medical college for the physician, or theological seminary for the minister of the gospel. It is no more legitimately its office to furnish academic instruction, than it is of the law or medical school.

It may be proper, or even necessary, that an academic department be connected with it, for the preparatory scholastic training of its students, but the relation such a department should sustain, and the work it should perform, ought in every case to be a subordinate and preparatory one. To call such a department, or any school in which mere academic or scholastic instruction is given a normal school, is a fraud upon the student and a libel upon the teacher's profession. Again: a commercial department, a department for teaching telegraphing, civil engineering, or any other business specialty, has no natural or proper connection with

a normal school, and might with as much propriety be attached to a theological seminary.

A normal department as an attachment to a college or an academy, assumes about the importance, and rises to about the dignity, that a medical or theological department would under the same circumstances; such misalliances have done much to belittle and degrade the normal school and, with it, the teacher's profession. Let business colleges attend to instruction in those matters which pertain directly to the formal transaction of business; let the academy and the high school be what they purport to be; let the college fill its proper place and do its appropriate work; let the law school, the medical college, the theological seminary, each furnish its students with the special and professional instruction and training needed; and what they do for the lawyer, the physician, and the minister, let the normal school do for the teacher.

DISCUSSION OF MR. MITCHELL'S PAPER.

In the absence of Miss Lathrop, Supt. HANCOCK was called upon to open the discussion, and said: It is not my custom to avoid duties imposed upon me, but there are those present who are familiar with every phase of this subject, and I wish to hear from them. This normal problem has been talked over in Ohio, and it has been frequently discussed in the National Association, but I believe we have never heard from our friends connected with the State Normal School of Michigan, a state deserving great credit for the progress it has made in the various departments of its system of public education; and I am very sure that all present will be glad to hear from them. Therefore, I ask that Professor Estabrook, if he be now present, and the other professors of that normal school, be called upon to open this discussion.

PROF. DAVID PUTNAM: It is true that we have a normal school in Michigan; but we do not think we know all about the normal problem. We came down here on purpose to learn something about it. I agree with the general sentiments in the paper just read, so far as I understand them. It is generally admitted, I believe, that education is not simply an empirical matter, although this is not allowed by all. It seems to me, that with the experience of teachers for two or three thousand years, or longer, some things, if not already settled, ought at least approximate toward the borders of settlement. It would be very strange if in all this time no principles have been settled so that we may begin to consider education a science. If we have not yet reached any thing that can be regarded a science, then I do not know that there is any use for professional schools for teachers. But admitting that some principles have been established by experiment, and by various other methods, it strikes me that we may teach these principles, and make such application of them as will enable teachers to apply them for themselves in their future work. I do not suppose that a person who studies the principles of medicine, is advised to apply those principles

to every form of disease before he enters on the practice of his profession.

So I suppose that a teacher who has thoroughly mastered principles and learned something of their application, will be able to carry this power of application out in the practical work of teaching. I propose calling up another gentleman who has been longer connected with the Michigan Normal School than I have. I refer to Professor Bellows.

PROF. BELLOWS. It is pleasant for me to stand upon this floor and speak in favor of Normal Schools. I am an earnest believer in them. I regard them as a prime necessity in our system of education. I can hardly conceive how our system of education can be rendered complete and successful without them. It seems to me that they are the great essential, the *sine qua non*, of our system of education. I was very much pleased and exceedingly interested in the paper presented on that side of the normal question upon which I stand. It must be that I do not understand the position of those on the other side of the question—those who maintain that the work of a normal school must be strictly professional. I can not conceive how the consideration of the subjects of science which we are wont to teach in our schools, can be wholly excluded. This view requires those who attend the normal schools to be graduates of high schools and colleges, in order that they may be as familiar with the subject matter of the sciences as is necessary to prepare them for a strictly professional training. I think that this is an unfortunate and false view of the normal school work. I am fixed in the opinion that it is better for a teacher to enter the normal school a mere youth, and there take a course in the ordinary branches of study, always having in view that great end toward which all must converge, a preparation for teaching as a profession. I am sure that the best professional training can be given in connection with academic instruction, given with constant reference to the method by which the subject is to be taught. I regard this as the grand foundation stone upon which all the work which we may wish to do in the so-called purely professional work, is to be based. In regard to practice teaching, circumctances must control to a large extent the manner in which it is done. In institutions having model schools, which represent the various grades of our ordinary public schools, the pupils have an opportunity to do actual teaching, under the eye and careful supervision of one who may have that work in charge. In other institutions those facilities are not offered, and consequently the opportunities for practice teaching are necessarily somewhat abridged. It is feasible, in my judgment, to do all the work absolutely essential in this direction, in connection with the daily recitations in the subjects of study which are taught in the normal school. In connection with the branches which I teach, I have a fine chance to give my pupils a large amount of practice in teaching. In reviewing arithmetic and algebra, for example, I throw the whole work into the hands of the class, and take my place as a member of the committee of the whole, on criticism, and my pupils in succession take charge of the class. In this way I bring in a very large amount of practice, and I have been very much pleased with the results.

Our plan is this. The teacher who has charge of the class goes over and develops the subject as a model, calling upon the pupils to recite, and drilling the class precisely as in an actual recitation. After the teacher has presented the subject, the members of the class bring forward their criticisms, pointing out false methods, asking questions as to all the points which may have occurred to them in the course of the teacher's development of the subject, and for this criticism they receive special credit. After they have presented all their criticisms, the teacher takes up any matters suggested, also points which may not have been noticed. I wish to call attention to one feature of this practice. It is not practice with a mock class. It is just such a class as the pupils will have to teach in the schools.

MR. HANCOCK: I think, Mr. President, that I can express the views of Miss Lathrop (who was to open this discussion) on one or two points, suggested by the remarks of the gentleman who has just occupied the attention of the audience. I am convinced from observation that a practice school is almost indispensable in a well conducted normal school. While the methods of practice that have been presented to us may be the best that the circumstances of state normal schools may now permit, we ought to look to a still higher development in these schools —to the time when they shall come to be strictly professional. I doubt whether any student can, with the highest advantage, carry on, at the same time, two processes of thinking so dissimilar as those of acquirement and communication. One or the other, or both, must suffer. If the pupil, while studying a science, is constantly thinking how he is to teach it, his knowledge of the science will be limited or narrow. Hence I think that, just so far as it may be practical, we should strive to make our normal schools strictly professional. My observation has been that the success of the school and the success of its pupils as teachers are directly proportioned to the scholastic acquirements demanded as a condition of admission.

Again, I think that the normal school should not attempt to do the work that ought to be done by high schools and colleges—work which can be, at least, as well done by these institutions as by normal schools. Let the normal school take students who have already an academic education.

The normal school should have, as I have already said, a practice department. When the class taught is of the same age and maturity of mind as the teacher, the practice does not meet the demand that the actual work of the schoolroom will make necessary. In teaching a class of mature minds, the same difficulties are not met as in teaching children. Besides, the young teacher needs practice in controlling and directing a school. All superintendents who have observed the work of normal graduates, will agree that they are much less successful in governing than in teaching.

The normal school should also have connected with it a model school, every grade of which is taught by one who is able to show by actual schoolroom work the very best result that can be attained with children of that age. The normal pupil should be able to see, day after day, as

other duties permit, a school which is as nearly perfect as it is possible to make it—to see what can be done by the master.

It seems to me that these three things brought together give us our ideal normal school. I do not think it possible that we shall attain to this, at once, but I do think it well for those who are connected with this important branch of the school system, the very center and life of it, constantly to strive to reach such an ideal. I do not believe that we shall ever be able to prepare anything like the majority of our teachers in normal schools. Our teachers' institutes will be the great medium through which these normal schools shall act on the great body of teachers. Their pupils will go into these institutes, and give the very best method of instruction to teachers throughout the state, and, it seems to me, that this is the chief end of the normal school to train up, in this way, leading teachers, and thus make it the head of the whole school system, the radiating point, the source of improvements. When this is true, reforms can be made in education. By simply teaching at this central point, we shall be able to institute, at once, a reform that shall be a benefit throughout every department of our system of education.

PRES. O. N. HARTSHORN: I must inqure—for I confess I do not know—how many normal schools there are in the United States which are strictly confined to professional work, according to the idea just presented. I believe in academic instruction in normal schools; and I believe in strictly normal instruction as presented by Professor Mitchell in his paper. Of the two, I think the latter is really the more difficult work and, so far as it applies to teachers, the most important. But here is a difficulty, so far as my observation is concerned. The majority of those who enter these normal schools must there prepare for this normal training by acquiring a knowledge of the branches to be taught. It is no fault of the normal schools that this is the fact, and possibly it may be the fault of other institutions. Many begin to teach with the belief that as soon as a person has a knowledge of the branches, he can teach them, just as many believe that having a knowledge of the law, they can practice it; or, having a knowledge of medicine, they can practice it. The fact that so many fail in teaching because they have not a knowledge of its principles and methods, shows that this is perhaps the highest profession, the highest calling among men. It has, indeed, been suggested, whether we ought not to have a training school for legislators, for our judges, and executive officers, because of the responsibility of these positions. But the teacher has to be a legislator, judge, and executive, and he is obliged to discharge these duties under difficult circumstances, requiring great skill, integrity, and judgment. To prepare these teachers properly for their duties, nothing short of the most careful training will answer. If there be any one thing for which proper facilities should be provided for, it is the training of teachers. It is not a little thing when, by the blunder of a physician, an arm must be amputated, which could have been saved, or a life is lost, which could have been saved; but this is a small thing compared with the loss of an immortal soul through the habits and influence of an incompetent or immoral teacher. I have frequently thought that we, as teachers, do not

fully realize the responsibility of the position in which we are placed. The teacher that indulges in immoral practices, as taking the intoxicating cup, or using profane language, exerts an influence which leads to moral death. If any one thing is needed, above another, in the character of a teacher, it is that integrity which will dare to do right,—to live up to the highest convictions of duty; and this is a matter that needs to be taught in the normal schools. This is an important element in the teacher's preparation, and we need to teach it by our example as well as by precept. [Applause.]

MR. BELLOWS: I rise to correct a misapprehension, which, it has been suggested to me, may have arisen in connection with what I said concerning the facilities for practice in the Michigan Normal School. This practice in teaching, to which I referred, is in addition to a systematic arrangement for observation and practice in connection with a school of observation and practice, as we term it, which is connected with the normal school. Our students very soon after entering the normal school, receive instruction in the fundamental laws of psychology and in the primary principles of methods of teaching, under a professor who has charge of that department. In connection with this instruction, or immediately following it, they are taught, by the different teachers, the application of these methods to the different departments of instruction. In addition to that, they have practice and observation in the "School of Observation and Practice", embracing pupils from the infant grade up to the highest grade.

PREPARATION FOR THE HIGH SCHOOL.

BY PROF. E. A. STRONG, GRAND RAPIDS, MICH.

During the past few years much sharp and more or less just criticism has fallen from many quarters upon the schools of America. This criticism has illustrated most happily the law of mechanics, which declares that a projectile will go farthest and do most harm at long range if fired with *medium* elevation. The primary and common schools have seemed to be as far below as the superior schools have been above the range of hostile criticism, which has all along trained its guns most constantly and effectively upon our secondary schools as at present managed and taught.

It may be that primary education has suffered but slightly from disparaging criticism mainly because our critics are somewhat too distant in time and space from these schools to be familiar with their vulnerable points; and that superior education, collegiate, technical, and professional, has been superior to criticism, mainly because she has herself supplied much of this criticism, which, from a different source, might have been of a different character. Still that these highest and lowest schools are really least obnoxious to censure, is indicated by the fact

that they have been so ready to welcome and use suggestions from whatever quarter, receiving from this source continually new life and vigor.

However this may be, it is unquestionably true, that the severest animadversions of thoughtful men in Europe and America have fallen upon our seminaries, academies, and high schools. Here, if we may trust the opinion of scholarly men, is the weak place in our educational system.

In view of this state of things, I shall rather acknowledge than insist upon the fact that I am a teacher in a high school, a member of that not-sufficiently-neglected class, among whom, to use the words of a friendly critic, "pretension is larger than achievement, and but for whom, and the inferior education which they supply, the American College might have attained a measure of excellence impossible under the present conditions."

Now these words of censure are not pleasant to hear, but they seem to me in the main true and even necessary. We who have to do with secondary education, freely acknowledge the deficiencies of the ordinary American High School and Academy. We can explain these deficiencies, but we have no heart to defend them.

However, one course of conduct still remains to us—to compound for our own sins by railing at the sins of our neighbors. In this way, if we are not able to save our reputation, we can, at least, save something in the way of injured feeling, just as the house-dog, prudently turning before the mastiff, soothes his wounded vanity by worrying the kitten. So it is with no little pleasure that I to-day pick up the arrows of hostile criticism, which lie thickly scattered around, and hurl them down the line, careless where they find a *final* resting place.

When the college declares that imperfect high-school preparation is mainly responsible for the defects of collegiate education it is consolatory to be able to say—"Certainly, just as imperfect grammar-school work conditions the work of the high school." When the press, the bar, the pulpit, and the rostrum charge all sorts of evils and deficiencies upon the higher departments of our public schools, it may not mend matters much, but it is grateful to the natural man to be able to show that these evils have their root—somewhere else.

Quite seriously, I believe that there is a general feeling among those who have given some thought to this subject, that there can be no radical improvement in high school education in which the lower departments do not share. It is the object of the present writing to make suggestions in this direction; to set forth briefly the sort of preparation for the high school which seems to me desirable; and to say in what respects this preparation is frequently defective. Permit me to say, that the special studies which I have made in this direction, have been mainly in the public schools of large eastern cities, and have not special reference to western schools.

One further preliminary. Preparation for a high school depends upon the sort of a high school for which one is to prepare, and, therefore, the former can not be set forth in a way which shall be useful to any body, unless there is an understanding as to the character of the latter. I can best represent my own ideal of a high school by saying that it is an edu-

cational institution, very much less like a college than are the real high schools which I find around me, and very much more like a grammar school, which, after all, is the department of our public schools, most thorough, methodical, and consecutive in its work.

When a boy leaves the preparatory school to enter the university, he carries with him his old text-books, reviews, and continues his former subjects of study, and goes on with his work by processes which are thoroughly familiar to him; but when he mounts from the grammar to the high school, he usually leaves behind him all his old books and subjects of study, and is frequently bewildered by methods of work which are unfamiliar and confusing in the highest degree. He feels that he is in a new world,—a world for which he has made little preparation. Heretofore he has been accustomed to give his best hours for six or eight years to a single branch of study; he now has six or eight branches of study in a single year, and as he goes forward in his course, new subjects gleam upon his vision and disappear like the changes of a kaleidoscope In his lower work new ideas and new terms came to him so infrequently and were held so long before his mind that he had time to absorb and assimilate them; now, of clearly-formed ideas, he has no idea at all, while new terms pass before him so rapidly, that they find no lodgment in his mind. The ordinary high-school *curriculum* is too much like a college curriculum, in that it contains much work that is not intended to have a very high disciplinary value. When a college class takes up botany for six or twelve weeks, its members understand that it is simply to relieve the labor of tugging at Greek roots and Latin stems by tugging for a while at roots and stems of another sort, or to furnish them with some terms and metaphors useful in a graduation thesis thereafter. This is right and necessary in a college course, where studies are rated at their true value; but in a high-school course, where less mature minds are not able to make this discrimination, it may be exceedingly harmful. The present high school, taught and managed mainly by men fresh from college, full of college ways and college ideas, interested in what they teach, but caring little for those whom they teach, has come to be itself, in many places, only a pigmy college, a dwarf university.

I would, then, have the high school more like a grammar school, and less like a university. I would have it cease scolding because pupils can not spell, can not read, can not compose, can not talk, and take up manfully the work of supplying these deficiencies; and I would have it controlled by officers who recognize the youth of their pupils, and are willing to supply its needs,—who are not ashamed to know something in a thorough and scholarly way of orthography and orthoepy and geography, and to teach these things when there is need.

But even the best high school is crippled by inadequate preparation—preparation most frequently inadequate in the following respects:

The lower departments of our public schools often fail to recognize the preparatory character of their work, but plan their instruction as if their pupils were to complete their studies in the senior school, notwithstanding the well-known fact that most of them purpose to go

forward, and many of them actually do go forward, to the high school. A glance at the facts in the case will render the necessity of such preparation sufficiently apparent.

It is not difficult to distinguish two stages in education: first, the *synthetic, objective,* or *acquisitional* stage, in which it is the main aim to gain facts by direct observation of those things from which alone the facts can be gained at first hands; and, secondly, the *subjective, analytic,* or *logical* stage, in which the *law* of the facts is sought in accordance with which the facts are discriminated and classified for their better statement, defense, retention, and use. Work of these sorts may be blended, but need never be confounded. Only upon the solid basis of slowly gathered acquisition can any really useful superstructure of generalized knowledge be reared. The question is not, as it is often said to be, whether we shall first state principles and then illustrate them, or first illustrate and then state; the real question is, whether we shall have anything to do with principles and systems of knowledge until we have some knowledge to systematize, and from which to deduce principles; or, in other words, whether we shall permit our pupils to have a share in their own education, to gather and adjust to their own shoulders any part of that load of systematized knowledge which we ask them to carry? I will assume that there can be but one answer to the question. There must, then, be a distinctly recognized acquisitional stage of school work, in which it is the main aim to acquire and use separate facts, comparing them, indeed. with each other and with those already acquired, but *without any reference to the whole of that field to which they belong.* This course of work may be *completed* in the high school, but for most high school studies, it must be begun and carried forward in the lower departments. It really *must* be, because much of it requires many years of work, and needs the large leisure and infinite curiosity of childhood. For want of such work as this, the high-school course of studies of even our best schools, for a long time, stood in the air, far removed from all entities and verities. But, happily, this is not so now. A carefully planned series of lessons in language and number, and physics and natural history, has paved the way for better work, in these directions, in the higher departments of our public schools, so that the high school finds it necessary only to *carry forward* the work that has been begun below. More and more every year, in our better schools, is the work of all departments becoming consecutive and systematic. More and more every year, do teachers appreciate the progressive nature of education, and understand that there is no subject of human inquiry which does not from some side address pupils of every age and grade of advancement.

Indeed, just now there is a tendency to attempt too much, without adequate preparation, in the lower schools, by which an educational product is furnished that is often sadly fragmentary and bizarre. Still I can not help suggesting that there are yet a few subjects of the high-school course which must ever be unfruitful until supplemented by an objective course in the lower schools. Prominent among these is astronomy. What may be called rational astronomy is often well taught in

our high schools, but for want of a sufficient basis of observation, students of this subject spend their energies mainly upon the explanation of unknown phenomena, the classification of knowledge which they have never acquired, and the attempt to conceive, with infinite pains, of an ideal heavens, while the real heavens swing nightly above them with their wealth of suggestion and instruction unexplored and unregarded. Would not a *few minutes'* real study of the stars for each month of the ten years previous to the high-school course, be of greater value than all the work of this kind that is now done in the high school and college? So, too, I can not but think that a little taste of history in the lower schools, largely biographical and anecdotal, would marvelously whet the appetite for this part of the work of the upper schools.

We come now to a more serious matter,—one to which it is the main object of the present writing to secure attention. As we have just seen, many considerations urge that our schools should recognize the earlier acquisitional, as well as the later logical stage of education. And, seeing that boys and girls take naturally to real knowledge, of which, under proper direction, they gather a goodly store, getting therewith also much mental quickening; and seeing that these acquisitions form almost their only capital in their future intellectual operations, and so condition their progress in the upper schools, what wonder that the lower schools acceded to so reasonable a demand! But let us see *how* they have met the demand.

Could any one guess that it would be by simply diluting and condensing the work of the high school, and putting this before the pupils of the lower grades, to be swallowed bodily? And yet such is the fact. That is to say, having at present in our schools somewhat too much of the formal and logical element, we remedy the difficulty *by adding a little logic.* This rational work, coming as it does in the high school, occurs somewhat too early in the course, and so *we put it in the senior school.* Pupils of the lower grades do indeed see some fragments of natural things, but they see them only as presented in a partisan and *doctrinaire* way, to illustrate a principle, to enforce a classification, to float a system. In a very true sense our pupils never come in sight of real things in simplicity and singleness of mind. *Systems,* in text-books or out of text-books, are all that they see. Generalizations more or less exemplified, form their stock in trade. The whole universe of nature, of art and literature, is only an immense illustrated show-bill, magnifying the excellence of the theoretic hobbies of the day. Our pupils study Cicero for Latin syntax, Shakespeare for English etymology, birds and beasts for Cuvierian classification, heat for the doctrine of conservation of force, &c., &c. It is for this reason that we find that the pupils who come to the high school, have indeed learned definitions, but having never formed them freely under natural conditions, they have not learned how to define; that they have learned generalization, but not how to generalize; have learned classification, but do not know how to classify.

It seems to me not difficult to show that in the majority of cases a definition, a classification, or any generalized form of statement, can be of little use to a pupil, unless he has himself formed it; and that he has

a right to it under no other condition. Indeed, these things are of little value in themselves and for themselves, as they belong to one man, one age, one race; if thrust upon another man, another race, another age, they are like apples of Sodom. Their chief value is in the *making* of them, and so, I would say, why not give our boys and girls a chance at this world-trade of system-building. Time enough they will have in high school and college to learn the systems that others have built. It may be said that the classifications and systematic knowledge of boys and girls will be very frothy things. Not to them, certainly, as these forms of knowledge have grown up under natural conditions, and as they are the best, at their stage of advancement, which they can use or even conceive. To others they may be very useless, just as everybody's theory is very useless to everybody else. Who can live comfortably in a house or a system built by another man? And who does not know that the next generation will slough off the formal and theoretic dress in which the present age has clothed its knowledge, will add its little mite of discovery to the saving of the past, and then recast the whole in accordance with its own habits of thought. I am more and more impressed every year with the uselessness of teaching classification, *at the outset*, in natural history. It is useless because at this stage of their advancement children *have nothing to classify*. It was certainly wiseiy put in the old recipe for cooking a hare: "First, *catch* a hare." So, I would say, in classifying a hare, first, *catch* him, study him, and get him into the mind as a real thing; he will then classify himself. Indeed, when things are really and thoroughly known, they drop into their places in a natural scheme as readily as pins drop into the cracks of the kitchen-floor. In the second place, a classification apart from the things classified, is a very unreal thing—

> "A creature borrowed and conveyed
> From book to book, the shadow of a shade."

These current classifications are confused and discrepant. *Whose* classification shall we use? I suppose that one-half the junior and senior boys and girls, from Boston to San Francisco, have been, during the past year, learning the old orders of the class mammalia. I wonder if it has occurred to one of them to ask for the *basis of this classification*. And yet no person ever makes a real division, without having in mind some principle with reference to which the division is made. Give a boy one hundred apples and tell him to divide them into groups, and he will ask at what he must look in order to make the division. Tell him to form three groups, one of which shall contain the sweet apples, a second the red apples, and a third the small apples, and will he not at once inquire what he is to do with an apple that is at once red, and sweet, and small? Now, does it not show the unreal nature of his knowledge in zoölogy, that he meets the same difficulty practically and really, at almost every step in his classifications without knowing it.

But, worst of all, the habit of hasty generalization is a *profoundly dangerous mental habit*, a habit that the temperament of our people, the tendency of the age, and, more than all, the vicious practice of the

schools have rendered one of the most formidable and far-reaching evils of our time. For my own part I should be somewhat slow to concede that *separate facts* have no educational value. Who has not seen the systematist climb some dizzy height, that his vision might stretch over half a continent, and adjust to their proper places all the parts of the grand landscape? and who has not seen him turn away from this dazzling breadth of view to rejoice in the separate facts of nature, more deeply moved by the little harebell, or the note of the wood thrush than by the grand panorama of mountain, and valley, and swelling sea? But granting that isolated facts are in themselves worthless, and that generalized knowledge is the supreme matter, it does not follow that we should not strive to come honestly by this highest good.

A word concerning a possible and useful preparation in zoölogy. In the lower grades I would have the pupils *observe* and *talk about* the *external appearance* and *habits* of common animals around them. Have only two precepts, "*Look*", and "*Tell*"; but require that the looking and the telling be of the best kind,—methodical, full, accurate. What would not a high-school teacher give, if the classes which come to him, had the habit, acquired by long practice, of seeing fully and describing well simple objects that are placed before them. I would ask the higher grades to study structure. Every member of the class should have a specimen (many if necessary) to pull in pieces, dissect, and subject to every process by which information may be gained. Let them learn to use a penknife, a needle, and a hand-lens, and their eyes will do the rest. Let the entire work of dissection, observation and statement be done by the pupils, who should be required to work methodically, to state clearly, and to demonstrate their statements. For the sake of humanity and economy, the material used should be the superabounding pests of the garden and the field, which, happily, are really the best things for first use. Have nothing to do with dried things or museum specimens. Indeed, a great museum is, at this stage of progress, a great humbug, as it presents for study material which may not be handled, or scratched, or broken, and which can be really studied only by these processes. What is wanted is abundance of material destined to perish in the using—to yield its lesson with its life. Now, I do not know anybody who has learned how to collect, handle and use such material in a neat and efficient manner, before large classes; and I question whether it is not wise, while somebody is finding out how to do this, for teachers in the junior and senior schools to confine their work in natural history to studies upon *plant* and *insect* life. At all events it is my earnest desire that pupils who come to my own high school, should rather come with a few accumulations which they may fairly call their own, and with their wits and senses sharpened and their sensibilities quickened by the study of real things, than loaded down with classifications, and tabular views, and such like glittering generalities. Schiller says that every road leads to the end of the world, but let us remember that it does not lead thither *at once*. There is a little traveling to be done.

There are some evils which grow out of the fruitful one above-mentioned that deserve attention. Pupils come to the high school so unac-

customed to observe, that they dare not trust their senses, and take no delight in their use. I should like to illustrate by a multitude of real examples, but forbear.

Again, there is a tendency on the part of pupils in the lower schools to rely too much upon books for facts that they could easily get by observation. I saw a boy, the other day, with a large beetle in his hand, go to a book to find the number of joints upon the tarsus. When asked why he did not simply *count* them, he replied truly that he would rather trust the book than himself. And he will always trust to the book, and will prefer descriptions of things to things themselves. I by no means wish to decry the use of books in education. We may say by anticipation that a boy is learned, if not educated, who has the habit of referring to authorities and standard works upon all subjects. Surely there is a period in the process of education when the opinions of thoughtful men and the history of opinions in all ages, which are to be learned only through books, are deserving of all attention, but that period is not at the outset of student life. Indeed, it is the result of my experience, that while a person may go from nature to books, he will never go from books to nature.

Again, are the *examinations*, especially those for promotion from grade to grade in the junior and senior schools, precisely what they should be? If they are not, as is sometimes alleged, somewhat ill-advised in respect to quantity, can they be quite right in *quality*, so long as they mislead pupils in regard to the nature and purpose of education. So often is it asserted in teachers' journals and teachers' conventions that education is mainly for culture, for efficiency, that we are sometimes led to think that teachers really believe it. A glance at any examination paper, however, in any school from Maine to Florida, will reveal the real opinions and aims of teachers, and will show that a pupil who has learned from such a page to such a page of his book, no matter in how mechanical a manner, goes forward, and the boy who has not learned this, stays behind, no matter what his culture and efficiency. Now it is very easy to make examinations of such a character as to show whether a boy has done one piece of work in such a way as to gain the ability to do another piece of work somewhat different—whether, indeed, he has gained something in the *order* and *method* of his work,—has quicker senses, a more sharpened understanding, a more cultivated judgment. For instance, I think that there is no examination in Latin that shows how much real good a boy is getting from his work like giving him a new and difficult author, to see how he will approach and examine the unfamiliar text. So in natural history, a new and peculiar form for examination will better reveal the method and spirit of the man than pages of questions upon old work.

I wonder if people generally are aware of the admirable character of the work that is done in our grammar schools in arithmetic and formal grammar? But has it ever occurred to any one that these subjects are a little *too* well taught?—that more thought is put into them by the teachers than is or can be taken out of them by the pupils? Now I would not change the present admirable methods of teaching these

studies, but I would suggest that the more philosophical portion of them be carried forward into the high school, and that their place in the grammar school be supplied by careful reading of good English and the study of ancient or modern languages.

This leads to another suggestion, which I also make with much hesitation. Surely nothing is more admirable than the *thoroughness* and *efficiency* of our middle schools. Whatever they have to do is planned so carefully, and the plan executed with such precision, as to give a sense of great competency and power. The effect of such a vast and strong institutional influence upon boys and girls quite too unaccustomed to exact discipline, must be well marked and of the most happy character. Nor can I think it an objection, at this stage of education, that such a strong and positive influence tends to smooth away individual characteristics and to reduce all pupils to one type, and that a somewhat mechanical type, of thought and activity, *so long as pupils work freely and happily under this restraint.* But when they begin to feel that this great overshadowing power works tyrannically or unwisely, the case is far different. And I know nothing that prompts to this feeling more frequently than the belief on the part of pupils, that they are restrained from doing their best work in *quantity* as well as quality. Indeed, is there not often in our best schools an attempt to attain a measure of perfection—of thoroughness, it is called, impossible under the conditions—to get a man's work from a boy—by which pupils are kept drilling upon a subject long after its life is drilled out? When I have suggested this to teachers, it has sometimes been freely and even proudly acknowledged, as if it were a fault that leaned to virtue's side. This seems to me a prodigious mistake; and, moreover, it is not the mistake of genius or scholarship, but of arrant commonplace.

Pupils usually come to the high school lamentably deficient in a practical use of the English language. For this deficiency, home culture and society influences are mainly responsible; but I fear that, upon a few points, the schools must share the responsibility.

The pupils of our public schools *rarely master the complex English sentence.* They can, indeed, analyze and parse these forms after the manner of their school books; they can even puzzle out their meaning, one by one, when they find them; but they do not form such structures for themselves, and *are not much profited by discourse in which they abound.* I apprehend that when children are said not to understand a sentence because of the hard words which it contains, the difficulty really is with the syntax. Indeed, children like long and unusual words, and, after seeing a new word a few times, come to have a very good notion of how it should be used, and what a sentence means in which it occurs—provided always that the sentence be simple. But a complex sentence is to an ordinary boy a stone of stumbling and a rock of offence. It is not his vernacular. He can work it out, but a sense of difficulty obscures the thought, and after all he only gets what is explicitly stated, and not the infinitely more that is implicitly bound up in the sentence. Try, for example, Bryant's "Whither midst, falling dew", etc., or a complex

structure from an ordinary history; or, if the presence of unusual words renders the test unsatisfactory, take the following doggerel lines:

"So when two dogs are fighting in the streets,
With a third dog one of the two dogs meets;
With angry tooth he bites him to the bone,
And this dog smarts for what that dog has done."

Now these words are of the simplest, and yet no boy in America, not a reader of Scott or Shakespeare or the Bible, is up to that sentence; and because he has trouble with this and all such structures, he goes forward heavily weighted in his educational career. Geometry and history and physics find their principal difficulty in this fruitful source and origin of evil.

As I may be thought to mean more than I do, permit me to illustrate. The case is, as if an ordinary college graduate should take up for light reading a novel written in Latin. He could make it out, we may charitably suppose; but will not the difficulty of doing so obscure the thought, that he will hardly be greatly interested in, or give a very clear account of, what he has read?

The remedy for this difficulty is a simple one, and would have been applied long ago but for the omnipresent and all-engrossing *great American arithmetic*: it is careful composition and careful reading of English classics.

Is it not also true, that English particles, especially subordinate connectives, fail to receive the attention which they deserve in our grammar schools? Not long ago I heard a recitation in geometry, which seemed to me of a very low order, from a failure on the part of the pupil to discriminate that which was *granted* from that which was to be *proved*. At its close the teacher remarked approvingly, "Very well, only you used *and* for *since* once or twice"! Perhaps the teacher was right in placing this mortal among venial sins, when he considered that the pupil never had had an opportunity in grammar or high school to learn better. As nobody seems to have found out how to bring children into a fairly correct use of their own language by its direct study, is it not good advice to boys and girls who are presumably to carry their studies beyond the grammar school, to get this culture through the Latin and Greek?

And now for the last strain of this jeremiade. How comes it that junior and senior pupils—indeed, all the pupils of our public schools, the country over—are so deficient in *courage* and *enthusiasm*, and that the better the school, the more marked the deficiency; so that these qualities are only found at their highest in the back settlements and rural districts?

Years ago I kept a country school (my first school) in a little red schoolhouse, between one of the high hills and one of the bright lakes of central New York. The dashing waterfall at the rear of the house, the green delta which it had formed with its wealth of grass and trees, the fine contour and the grand shadows of the hills around, the still lake repeating such another picture from the opposite shore, still come to me pleasantly across the intervening years; but, most of all, I remember and wonder at the courage and aspiration of that bevy of ill-taught boys

and girls. There was nothing that they would not attempt—nothing that they did not believe themselves able to do.

Another incident. A friend of mine prepared, at considerable trouble and expense to himself, an exhibition of rare tropical birds for the delectation of the pupils of a grammar school in an eastern city. On the evening of the exhibition, he was surprised and annoyed at the indifference,' the positive aversion to his entertainment, which the pupils manifested. They feared that somebody would wish them to remember about these birds, or that it might be the beginning of additional work.

Incidents of this kind are familiar to persons acquainted with junior and senior schools. I have often heard principals of these schools, while boasting of the plodding perseverance of their pupils, deplore their want of curiosity, hope, and enthusiasm. Goethe says that the spirit of the man is the main matter; and surely that spirit is not quite right, in which these active principles of our nature are wanting or repressed.

The time for adjournment having arrived, Supt. Duane Doty, of Detroit, and Prof. E. H. Cook, of Columbus, who had been appointed to open the discussion of Prof. Strong's paper, excused themselves in a happy manner, and the subject was not further discussed.

ADDRESS OF PROF. HEIKEL.

W. D. HENKLE, of Salem, Ohio: Many of the teachers present may not be aware that the Association is honored by the presence of a very eminent gentleman, Prof. Felix Heikel, of Helsingfors, Finland, who is traveling in this country. This gentleman has been present at every one of our sessions, listening attentively, and, as he is the representative of the schools of a foreign country, I move that he be invited to address the Association.

Prof. HEIKEL, being introduced, spoke as follows:

Mr. President, Ladies, and Gentlemen: I fully appreciate the kind intention of the President in calling on me on this occasion. I must, however, confess that I would rather keep my seat. I have heard in this hall so many excellent and spirited speeches, that I am quite ashamed to attempt to speak to you. I think that my words will reach you as cold winds from the Arctic Ocean, where ice and snow cover the ground all the year.

It is said of the old Greeks, that they were a people of artists; but I think it may be said, with still more reason, that the Americans are a people of speakers. [Laughter.] Every American can make a speech. [Renewed laughter.] If he can not, he is not an American. I have often been told, and I have seen the truth of the remark to-day and yesterday and the day before, that the American not only can make a

speech, but he also likes to do it, and he takes every opportunity to make a speech. [Great laughter.] During the six months I have had the pleasure of spending in America, I have seen only one occasion where a distinguished American was present and did not make a speech, and that was at his own funeral! [Loud and prolonged laughter and applause.]

The Fins are not a very talkative people. They are more reserved and contemplative. We would rather see and hear than speak, and especially if obliged to speak in a foreign language which we have not mastered.

My travels here in America have been very pleasant, and I can say that I have not had so instructive and interesting a time in my life as I have had in America. The Europeans need to travel in America, not only because we know so little about it, but because we have here very much to learn.

In Europe we have very many prejudices against Americans and American institutions. We know that here you have one federal government, that you have thirty-seven state governments, and, besides these, territorial governments, and governments for cities and towns. We think, therefore, that everything here must be very changeable; that there can be no uniformity here, as in the old countries; but it is astonishing to a stranger to see how little truth there is in this. I have been astonished to see how like each other are the school systems in the different states. They are different only in details; not in the large principles governing the whole. And I have not been able to see any other reason for this uniformity than this noble emulation among the different states, which exists here in America. In almost every place that I visit, I hear of some things that are most excellent. Some have the most beautiful schoolhouses; some the best discipline; some the best methods of teaching geography, and some the best libraries, and so on. Everybody tries to be *best* in something, and thus improvements pass with great rapidity from one state to another. I do not know that I am right, but I think that some improvements are going on faster in the western states, and especially in Ohio, than in the eastern states. [Applause.] This emulation and the great interest which the people take in the public schools constitute, I think, the two means that make American schools what they are. In the last respect, there is a very great difference between the schools of America and Europe. I may say that in my country, and in other countries in Europe, school matters are questions only for teachers and superintendents. The great public does not take any part in them, or, at most, very little. I do not know of any better means of making schools good and popular and flourishing, than this warm interest of the great public in them. It is needed, and especially in a free, republican country, but it is also needed in monarchical countries. This is one thing which very much strikes a foreigner.

The systems of schools in America and Europe differ, as you know, very much, and I can not help asking myself the question, "Which of the systems is best to develop, not only the intellectual faculties of the children, but also their moral and physical powers?" As for morality, you know that in Germany much care is taken respecting religious in-

struction, and the same is the case in Finland. Many hours every week are devoted to religious instruction. And what is this religious instruction? It is reading, sometimes memorizing, the catechism or Bible history, and often this is done in a very dry way. In America you have nothing of this, but you have a discipline and order and cleanliness in your schools, which, I think, you can find nowhere else. You have, besides this, the instructions of the teachers in so-called morals and manners.

Now what do statistics show as to the result of these systems? Which of these people is more religious, and which has more confidence, more trust in a higher Being? I do not think that anybody who has studied the two peoples, can be deceived on this question. The morality in America is, according to the statistics, much higher than in Europe, and the religious interest is much higher. If you hear two Americans talking with each other, you can be very sure that they speak either about business, or about politics, or about religion. The religious question is agitating all the people, and is almost the foundation of the American community.

As for physical development, what do the different countries do for that? In Germany, I saw in every city, in all the large school buildings, a large hall devoted only to gymnastic exercises, and these are conducted in a very systematic way, and the strength of the pupils is greatly developed; but in America you have very little of that, but you have, instead, good schoolhouses, thorough ventilation, and much care is taken in regard to the seats of the pupils, and that they be defended from anything that can hurt their health.

As for intellectual instruction, I think we see from two different points. One is the giving of useful knowledge to the children, and the other is the development of their intellectual powers. The knowledge which is given in the common schools in both countries, is on the same subjects, and I do not know in which country the common schools go farthest. As to the development of the mind, that depends more upon the manner in which the knowledge is given; what methods are used. In touching on methods of teaching, I think I come to a hard question. Every body speaks about methods, everybody instructs in the best methods, and everybody makes a book in the best methods. [Laughter.] But what are the best methods; that I do n't know. [Laughter.] I think that all will agree that the best methods are those which give the best results; but on this point there are as many opinions as there are teachers, or, at least, as many as there are superintendents. One calls it good results in arithmetic, if the child can count one hundred, forward and backward, with great rapidity; another, if the child can combine the smaller numbers in every way. There are different opinions in every respect.

We must, however, confess that there are differences in methods; also, that the line can be drawn between them. One method is adapted only to give the knowledge; that the pupil may know as much as possible. Another tries, not so much to give knowledge, as to develop the mind;

that is, it gives the knowledge in a natural, philosophical way, I may say. If we compare Germany and America, we will see that the first method, which is more mechanical, is more prevalent in America, and the more rational method is more prevalent in Germany. I do not say that the Americans employ only mechanical methods, or that the German schools use only rational methods, but, as a class, I think it is so. In applying the good things in the German methods to the American, I think it will be seen that the western states are, in many respects, ahead of the eastern states. But though Americans may teach a little more mechanically, this is more than made up by the free institutions of America. I have often been astonished in conversing with laborers and mechanics, who have talked very intelligently of the dangers of American public affairs, to find, after awhile, that they could neither read nor write. Your free government and the interest that every man takes in public affairs compel him to think. This free republican government, of which you are so proud, is a better educator of the people than any thing else; and it will also make the schools good, so that they will grow and flourish, and I think, in a few years, they will be the first of all schools, including those of Germany and of all other countries in Europe.

I take this opportunity to return my most grateful thanks to the teachers and superintendents, to whom I am under great obligations, for their kindness and attention to me. They have not only shown me their schools and given me a look at their improvements, but they have also shown me personal friendliness for which I can never thank them sufficiently. I go away from America with the impression that the Americans are the most hospitable, most friendly, and most cordial people I ever met.

EDITORIAL DEPARTMENT.

—This number, which is about twice the usual size, contains the proceedings of the joint meeting of the Ohio and Michigan Teachers' Associations, held at Put-in Bay the first week of July. President Angell furnished only an outline of his address, and the annual address by Prof. Morse was not reported, owing to his free use of blackboard illustrations. The impromptu addresses of Prof. Putnam, of Boston, on drawing, were not reported. With these exceptions the report is complete. The phonographic reports of the discussions have been carefully revised and condensed, and it is believed that they will be found commendably accurate. We have taken great pains to present the substance of each speaker's remarks in his own words. Our October number will contain a like report of the meeting of the Ohio Superintendents' Association, held at Put-in Bay on the first day of July.

——The meeting of the National Educational Association, held in Elmira the first week of August, was a decided success. The attendance

was larger than at either of the two previous meetings. The number of college presidents and professors present was unprecedented. Twenty-nine states were represented. The exercises were well sustained. Prof. S. H. White, of Peoria, Ill., was elected president of the General Association; A. P. Marble, of Worcester, Mass., secretary; and John Hancock, of Cincinnati, treasurer. We hope to be able to give a fuller report of the proceedings next month. We much regret that pressing duties prevented our attending the meeting.

—— It is stated that the Vienna Exposition awarded twenty-five prizes in the department of education, teaching, and instruction to United States exhibitors. The National Bureau of Education, the Smithsonian Institution, the State of Massachusetts, and the City of Boston each received a grand diploma of honor, the highest prize given; Cincinnati and Chicago each received the grand medal of progress; Cleveland, and Jacksonville, Ill., diplomas of merit; and the gold medal of merit was awarded to Messrs. Wilson, Hinkle & Co., of Cincinnati, as "the publishers and manufacturers of the best school-books in the world." As soon as we receive the necessary information, we shall announce all of the American exhibitors to whom these twenty-five prizes were awarded.

—— County and city superintendents, principals of graded schools and academies, and teachers of all grades are authorized and requested to solicit subscriptions for this journal. If the many friends of the National Teacher will make an earnest effort in its behalf, a thousand new names will be added to its subscription list before the middle of November. Subscriptions may begin with the July or October number. See fourth cover page.

—— Those of our readers who may wish information respecting the best text-books, old and new, published in the United States, should examine our advertising pages this month. They contain the announcements of the leading school-book publishers, and also advertisements of superior school furniture, school bells, silicate book slates, etc., etc.

—— Scribner, Armstrong & Co., of New York, have issued the long announced Physical Geography by Prof. Arnold Guyot, "the foremost geographer of the world."

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Errata.—For "worms", page 332, line 34, read *mollusks;* for "got", p. 345, l. 3 of "note", read *set*; and for "Ithica", p. 360, read *Ithaca.*

NEW BOOKS RECEIVED.

REPORT OF THE UNITED STATES COMMISSIONER OF EDUCATION FOR THE YEAR 1872. John Eaton, Jr., Commissioner.

A MANUAL OF MORAL PHILOSOPHY. By Andrew P. Peabody, D.D., LL.D. New York and Chicago: A. S. Barnes & Co. 1873. Price, $1.25.

A LATIN GRADUAL; to accompany the Author's Latin Grammar. By G. K. Bartholomew. Cincinnati and New York: Wilson, Hinkle & Co.

THE SCHOOL STAGE: A Collection of Juvenile Acting Plays. By W. H. Venable. Cincinnati and New York: Wilson, Hinkle & Co. 1873. Price, $1.25.

A NEW SYSTEM OF LATIN PARADIGMS. With a Synopsis of Declensions. By Cortland Saunders, A.M. Philadelphia: J. B. Lippincott & Co.

ROLPH'S NORMAL SYSTEM OF PENMANSHIP. In Six Numbers. By H. Rolph. Chicago: Adams, Blackmer & Lyon.

SCHOOL REPORTS AND PAMPHLETS.

Annual Report of the Board of Education of Connecticut. 1873. B. G. Northrop, Secretary.

Report on the Boston Normal School. 1873. Charles Hutchins, Chairman of Committee.

Report of the Salem (O.) Union School. 1872-73. W. D. Henkle, Supt.

Report of the Minister of Public Instruction for the Province of Quebec. 1871-72. P. J. O. Chauveau, Minister.

Annual Report of the Board of Education of New Hampshire. 1873. J. W. Simonds, Supt.

Our Country's New Era: An Address to the Society of the Alumni of Wittenberg College. 1873. By Hon. Jacob D. Cox.

German in the Public Schools: Its Direct and Tangible Value. New York: E. Steiger.

Circular of Information of the U. S. Bureau of Education. No. 1. 1873. John Eaton, Jr., Commissioner.

School Laws of Iowa. 1873. Alonzo Abernethy, State Supt.

Minutes of the Mahaska County Teachers' Institute, Oskaloosa, Iowa.

The Normal Training of Teachers: An Address by Hon. John Eaton, Jr., U. S. Commissioner of Education, at the Inauguration of the Cumberland Valley State Normal School, Shippensburg, Pa. 1873.

Annual Report of the School Committee of New Bedford, Mass. 1872. Henry F. Harrington, Supt.

CATALOGUES.

Carleton College, Northfield, Minn. 1872-73. Rev. Abel K. Packard, President.

English and Classical High School, Providence, R. I. Wm. A. Mowry, A.M., and Charles B. Goff, A.M., Principals.

The Cumberland Valley State Normal School, Shippensburg, Pa. Geo. P. Beard, Principal.

Wisconsin State Normal School, Platteville, Wis. 1872-73. E. A. Charlton, Principal.

West Chester State Normal School, West Chester, Pa. 1873. Geo. L. Maris, Principal.

Otterbein University, Westerville, O. 1872-73. Rev. H. A. Thompson, President.

University of Nebraska, Lincoln, Neb. A. R. Benton, Chancellor.

Stockwell Collegiate, Normal and Commercial Institute, Stockwell, Ind. J. G. Laird, Prin.

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THE

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OHIO SUPERINTENDENTS' ASSOCIATION.

PROCEEDINGS OF THE FIFTH ANNUAL SESSION.

The fifth annual session of the Ohio Superintendents' Association was held at Put-in Bay on Tuesday, July 1st, 1873, commencing at 10 o'clock A.M.

The meeting was called to order by John Hancock, chairman of the Executive Committee.

Prayer was offered by Rev. Dr. Hartshorn, of Mt. Union College.

The President, Samuel Findley, of Akron, then read his Inaugural Address, which was as follows:

MORAL AND RELIGIOUS INSTRUCTION IN PUBLIC SCHOOLS.

BY SAMUEL FINDLEY, AKRON, OHIO.

Could we grasp the divine idea, of which the human soul is the expression, we might have some adequate conception of the purposes and possibilities of human culture. It is sometimes asserted by men who claim to speak with some authority in such matters, that the great end of education is to fit men for "getting on" in the world,—to train men for their particular occupations. It may be freely admitted that every man should be fitted for some honorable and useful occupation, and should pursue it persistently; but as a means, rather than an end. A man's life is more than meat and drink. The necessity laid upon men to labor for food, clothing, and shelter, is itself a valuable part of their moral discipline; and the good things of earth, which a man may get by industrious effort, are not to be despised; but there is a spirit in man whose cravings can never be satisfied by the bread he earns. That train-

ing is best for a man which is best calculated to develop all his capabilities. The particular sphere which any one is to occupy in life, can not be determined beforehand; and it would seem very unwise to spend years in trimming and shaping a human soul for a niche it may never occupy. Far better would it seem to seek the perfection of our human nature in every direction, and in all its capabilities. If, to the highest physical development, and the best scientific, literary, and æsthetic culture, we add supreme regard for God—an acknowledgment of His sovereignty, and a practical recognition of our relations to Him as His children, we have, probably, the highest human conception of the perfection of our nature. And a peculiarity of this perfection is, that it is not a fixed quantity, but rather an infinite progression. Human perfection consists in forever growing. St. Augustine said, "That is the true perfection of a man to find out his own imperfection."

But in the light of such an ideal, how very inadequate is the training of our schools. It is partial, incomplete, one-sided. It cultivates the lower faculties, leaving the higher and nobler powers to the blight and decay of inactivity, or to such chance development as other and less systematic influences may afford. Our schools are doing much to develop the intellect, and the results attained in this direction are not to be disparaged; but we have failed, in too great a measure, to recognize the fact that the human soul is endowed with other and higher faculties, equally susceptible of growth and cultivation. Our schools are doing much for the head (not too much), but far too little for the heart.

The great educational want of our day is heart culture; and the great desideratum in the teachers, who are to bless coming generations, is heart-power. Momentous changes are taking place in the world. The human family seems to be in a transition state. The old foundations are breaking up. The old landmarks are being removed. Of the dogmatic structures which have stood ever since the days of Martin Luther, few are likely to be found standing (in their old form, at least,) at the close of the present century. These changes, though likely to result in great good to our race, can not but be attended with suffering and loss to many individuals. It is a time which tries men. It is a time when they feel the need of something better than the framework of creed and ritual. That which is most likely to stand the trial, and pass safely through all these changes, is the tender conscience and the trusting heart. Men are coming to feel more and more the need of a power of vision which will enable them to see other than material things; an understanding which will enable them to apprehend higher thoughts than the subtleties of human philosophy. There is a higher knowledge than sense-knowledge. There are truths which deeply concern us, which never can be reached by scientific method. The very highest development of mere intellect can never attain to a knowledge of the highest truths. "He that loveth not, knoweth not God, for God is love." The power to apprehend spiritual truth proceeds from the heart. "With the heart man believeth unto righteousness." The divine educator of our race begins and ends with the heart, as that which determines the character. A man is what his

heart is. The heart gives temper and tone to the whole being. It is the fountain from whence the streams of life issue; and the stream can not be good unless the fountain be pure. Any system of education which neglects the cultivation of the heart, seeks to purify the stream without any regard to the fountain.

This, it is true, is a sphere in which we must recognize the direct agency of an unseen, but efficient power, coming to us from above, to work in and renew the natural forces of our humanity. But this does not diminish aught of human responsibility. The cultivator of the soil fully recognizes the fact that sunshine and rain are essential to vegetable growth; but he is, on that account, none the less assiduous in his endeavors to so prepare the soil that these may operate under the most favorable conditions; nor is he any the less vigilant in preventing the growth of noxious weeds which would tend to hinder the growth which he would foster.

There is in every man a native power of spiritual apprehension, which is subject to the general law of human development. It may, by proper stimulation in childhood, be made to live and grow till it becomes strong; or it may be dwarfed and enfeebled by neglect and disuse, until the soul almost loses the consciousness of the possession of any such power. And, furthermore, all our faculties are so closely related, that all suffer from the neglect of any. The highest intellectual culture is never reached where the cultivation of the heart is wholly neglected. A French writer, Aimé-Martin, has said that the continual operation of intellect, without the presence of God, dries up and exhausts the soul. True intellectual culture requires frequent appeals to faith, to feeling, to conscience; right intellectual development is largely dependent on a healthy heart. From this it is clear that moral and intellectual development should be carried on simultaneously, and, as it were, by the same impulse. Each is the complement of the other. To separate them is to defeat the object of both. But were it possible to separate them, and to give precedence to either, moral culture has the first claim. "The moral and religious part of man's nature is the highest part. Of right it has sovereignty and dominion over all the rest. The whole scheme of creation, at least so far as it relates to man, was based on the supremacy of the moral faculties." Civilization is but the ascendancy of the moral and religious element of man's nature in the aggregate.

Some one has said that man with intellect developed, but lacking the restraining and sanctifying influences of an enlightened conscience, is an animal with a reason, but only an animal still. A notable example is found in Rulloff, the Binghamton murderer. He is described as a man of science and a classical scholar of respectable attainments. He could talk of the unknown and the unknowable as learnedly as the philosophers themselves. But in the account he himself gives of his early life, there is no trace of any moral or religious instruction. His whole power of mind seems to have been concentrated on material things. His love of knowledge was without any elevating direction, unassociated with any thought of a higher life than that revealed by external sense. He

seems to have early imbibed that materialistic philosophy which discards all moral intuitions, and all knowledge which is not derived through the senses. The deed which this man expiated on the gallows, was but the natural sequence of his previous education. Had moral and religious influence been a leading element in his education, it would, in all probability, have changed the whole current of his life. This is but one of a multitude of examples with which the world abounds, which, though less notable, none the less clearly point in the same direction.

> "Unless above himself he can erect himself,
> How mean a thing is man."

It is hard to account for the aversion of men to the cultivation of their higher nature. It must be because men generally live in their lower faculties. Bunyan's man with the muck-rake aptly illustrates the tendency of men to follow their lower animal instincts, rather than their higher spiritual intuitions. This man is represented as shut up in a dingy room, and having a muck-rake in his hand. He looked no way but downwards, while a shining one stood above him with a beautiful crown in his hand, which he offered to give him in exchange for his muck-rake. But the man refused to look up, and kept on raking to himself the straws, the little sticks and dust which lay on the floor of his dingy room. The higher and better the culture proposed, the more determined and violent the opposition of men who live only in their lower nature. The whole question of drawing as a branch of education was settled at a stroke, and forever, by the man who said, "*Maken them thar picters dont do my boy no good.*" And this man is a specimen of a very large class, for whom æsthetic culture has no attractions, and to whom true moral and religious instruction is absolutely repugnant. For want of early cultivation their higher faculties lie dormant. They are no more capable of apprehending spiritual truth, than the deaf man of recognizing sound, or the blind man of distinguishing colors.

An unwarranted distinction is sometimes made between moral and religious instruction. Any system of education which ignores all moral influence, would scarcely find an advocate in this or any other enlightened land. All are agreed that the instruction in our schools should tend to the formation of upright character in the pupil; but at the mention of religion, which is the only foundation of all good morals, opposition is at once aroused. There must be no religious instruction in the schools. That would be carrying the matter too far. This feeling probably arises, in a great measure, from the habit of confounding religion with sect, and dogma, and theological systems. It should be borne in mind that the discords, intolerance, and bitterness of the religious sects, are uot religion, but the death-throes of the old irreligion in the heart of man. For the opposition which now exists to moral and religious instruction, much of the responsibility must rest upon the churches. When they cease their conflict with each other, and when earnest effort to show men how to lead pure and noble lives takes the place of theological disputation, we may expect much of this opposition to disappear. The

great progress made in this direction in the last twenty years gives hope for the future.

Religion is defined by Dr. Watts as "duty to God and our neighbor", and by Worcester as "an acknowledgment of God as our Creator, with a feeling of reverence and love, and consequent duty and obedience to Him; duty to God and His creatures." This is the sum of all morality. There is not a moral maxim, nor an ethical principle deemed valuable by civilized and enlightened men, which is not included in the Christian religion. The great central fact of Christianity is Christ giving himself to help men into the way of right living. True religion is the voice of God speaking to the hearts of men, calling them upward to himself. And may not the youth of our schools be taught to recognize that voice, and heed its warnings and invitations? Horace Mann has well said:

"The domain of education extends over the three-fold nature of man; over his body, training it by the systematic and intelligent observance of those benign laws which secure health, impart strength, and prolong life; over his intellect, invigorating the mind, replenishing it with knowledge, and cultivating all those tastes which are allied to virtue; and over his moral and religious susceptibilities also, dethroning selfishness, enthroning conscience, leading the affections outward in good will toward men, and upward in gratitude and reverence to God."

The happiness of individuals, and the purity, prosperity, and permanence of society, imperatively demand the cultivation of all those susceptibilities of our nature whose proper development tends to range the will on the side of God and right. There is no safety, either to the individual or to society, in any other course. Are not we in this land already reaping the fruit of our false views and neglect in this matter, in the low state of public morals, the corruption of the public conscience, the betrayal of public trust, and the general disregard of moral obligation, which seem at times to threaten the very foundations of civil society? The Prussian maxim, "Whatever you would have appear in the life of the nation, you must put into its schools", is a good one. If we, as a people, are to enjoy the blessedness of the "nation whose God is the Lord", we must teach the fear of God in our schools.

It is sometimes objected that there is diversity of opinion among men in matters of religion, and, therefore, religious instruction should have no place in the public schools. There are wide differences of opinion on scientific subjects. For example, in the science of geology alone, more than eighty different theories have been held by scientific men of the present century. Shall science, on that account, be excluded from the schools? There are also differences of opinion in regard to the administration of government, and even in regard to the principles on which government is founded. Shall we, on that account, forbear to administer government? Because a teacher is a Republican, or a Democrat, must he be restrained from giving such instruction in the principles of government as would tend to fit his pupils for good citizenship? Teachers ought to be restrained from bringing into their schools any of the peculiarities of the religious sects which divide the Christian world. Their own sense of propriety should restrain them from this. But the

religion which the Great Teacher taught, should form a part of the instruction in every school. Its practical principles should be directly inculcated, and its spirit should permeate all the instruction and all the discipline of the school. A recent Chicago school report contains this excellent sentiment: "Sectarianism and partisanship have no place appropriate for them in any institution under governmental support or control. But for patriotism and *pure religion* an appropriate place is found in every institution controlled and supported by government."

But it is claimed that religious instruction can not be given in public schools without infringing the rights of conscience. The very first right of conscience, and that upon which liberty of conscience depends, is the right to be enlightened. Strange that to instruct and enlighten the conscience, and teach men to obey its dictates, should be deemed a violation of the rights of conscience! But even admitting that it should involve some things contrary to the blunted moral sense of some, should that settle the question? Would not the exclusion of all religious instruction from the schools be a far greater violation of the rights of conscience? How is it in regard to other matters? Do we permit private conscience to interfere with public good? Do we feel bound to respect the Mormon conscience? Did we respect the slaveholder's conscience? Shall we deny to the state the right of self-preservation, because some of her citizens are conscientiously opposed to bearing arms in her defense? Much less should we deny to her the right of self-preservation by securing the integrity as well as the intelligence of her citizens.

But it is still further argued that religious instruction belongs to the family and the church, and not to the school. To this it is a sufficient answer, that it would leave a large number of youth without any moral or religious training; and if it is incumbent on the state to undertake any part of the work of instruction, there is none so essential to her welfare as that which will tend to secure purity and virtue in the lives of her citizens. Vast multitudes of children are reared in godless homes, only a tithe of whom ever come under the influence of church or Sabbath-school; and of those who do attend Sabbath-school with more or less regularity, not all, by any means, can be said to receive effective moral and religious training. I am constrained to say, that I believe the influence of many Sabbath-schools, on account of their low standard of discipline, and the low order of teaching talent employed, are far less efficient, in producing good moral character, than the thorough discipline and instruction of the public school, even where no direct moral instruction is imparted. I believe the tendency in many Sabbath-schools is to both moral and intellectual dissipation. Not all Sabbath-schools deserve this censure; but in most there is need of much higher standard of discipline and instruction. They have a higher mission than the amusement of the children. The public school is the only place where moral and religious influence can be brought to bear on the great majority of those whose homes are devoid of it; and no other instrumentality is capable of producing such definite results in this direction. Not even the Christian ministry is above the teach-

er's profession in the variety, adaptation, and power of its appliances, and in the immediateness and productiveness of the results which may be gained by their use. The minister teaches at intervals, while the teacher's work goes on from day to day. The preacher can point to the right path, but he can not make his hearers walk in it. He can not constrain the will, and bind it firmly to duty; nor can he use the power of personal authority and discipline, or stamp his own entire individuality, with all the weight of his varied knowledge and force of character, upon his people, as can the true teacher upon his pupils. He labors to impress those whose habits are fixed, and whose sensibilities are blunted. The teacher operates upon the impressible minds and hearts of youth, whose souls are all aglow, and whose hearts are plastic under the gentlest touches of his hand, and tenderly responsive to all his thoughts and feelings.

I would that the teachers of our land felt the weight of responsibility which rests upon them. What talents are committed to us by our Lord! What golden opportunities for doing good!

I am not unaware that difficulties lie in the way. I admit the seeming force of many of the objections urged against religious instruction in schools supported and controlled by the state; and I freely confess my inability to comprehend, in all their bearings, the complicated social and political problems which the question involves; yet, it seems to me, the necessity is laid upon us, and we dare not shrink from the duty on account of the difficulties. The true solution of the problem can only be reached by the Christian teachers of the land going forward in the accomplishment of the work. There is one view of the case which should have great influence with us. All the difficulties attending this question have their origin in human imperfection, or, to use a stronger term, in human perverseness. It is not to be supposed that if the human family were in its normal condition, there would be doubt in the minds of any in regard to the propriety of teaching all the children in our schools to fear God and keep His commandments. The true course for us as teachers to pursue, is to press forward steadily and carefully, gaining wisdom and skill by experience, and trusting to the Great Teacher of mankind to direct the issue. There is much need for the exercise of prudence. We should ever remember that "the servant of the Lord must not strive; but be gentle unto all men, apt to teach, patient; in meekness instructing those that oppose themselves."

A full consideration of the practical part of this subject can scarcely come within the limits of this paper. Let it suffice to indicate briefly some things which lie within the scope of moral and religious culture in schools. The instrumentalities for the formation of good moral character, may be included under two general heads: instruction, and influence.

There is a very prevalent impression that the best moral instruction is that which is least formal; that which may be imparted in connection with other subjects of instruction, or which may be given incidentally, without the setting apart of any time for the purpose. It is doubtless

true that much valuable instruction may be imparted in this way. The teacher who has an ardent desire to do this work, can find many occasions for impressing the minds of his pupils with valuable moral lessons. But do we not find that amid the multiplicity of subjects requiring the time and attention of the teacher, no fitting place is likely to be found for a subject to which no definite place is assigned. It is doubtless for this very reason that moral and religious instruction is so much neglected in most of our schools. No one would expect the success of an attempt to teach grammar or arithmetic in that way. It seems to me that not only should there be time set apart for this work, but it should be carried on after a carefully devised plan. A text-book, or, at least, a teacher's manual, would seem to be a necessity.

First in order and importance among the things to be taught, and requiring constant inculcation, is the fear of God. "The fear of the Lord is the beginning of wisdom." Jacob's favorite son, one of the purest and strongest characters in history, gave the key to his life when he said, "I fear God." This includes in it reverence and love for God as our Father, a recognition of His authority over us, and the obligation resting upon us of obedience and submission to Him. No other power is so efficient in the education and development of our race, as a vivid conception of God's active presence, and conscious, intelligent interest in human affairs. The thought of God's personal presence should be kept constantly before the minds of the young. "Thou God seest me" is an appropriate motto for every schoolroom. The true idea of God clearly unfolded within us, moving us to adore and obey Him, and to aspire after likeness to Him, produces the highest and best growth of our nature. Nothing else so thoroughly awakens the moral sense within us, and leads to the complete enthronement of conscience over the lower desires, appetites, and passions. The moral sense may be awakened very early. The greatest difficulty arises from its neglect until the selfish desires and passions have grown strong. If from childhood men were taught to follow the first intimations of conscience, honestly to obey them and carry them out in action, the power of conscience would grow so strong as to become the controlling principle of the life.

But if conscience is to be enthroned, it must be enlightened. If this light which is given to light every man, be nothing but darkness, how great is the darkness. An unenlightened conscience is a blind guide. Youth should be instructed in the principles of Christian ethics. They should be taught to know the right and inclined to do it. For this purpose there is no other instrumentality which can compare with the teachings of the Bible. It is the only perfect text-book. It has been prepared and adopted by an authority higher and wiser than boards of education, or state legislatures. Its author is He who made the soul of man. He knew the capabilities and tendencies of the human powers as no man can know them, and He has given in this book the instruction best adapted to produce the purest and strongest character. "The law of the Lord is perfect, converting the soul: the testimony of the Lord is sure, making wise the simple: the statutes of the Lord are right, rejoic-

ing the heart: the commandment of the Lord is pure, enlightening the eyes: the fear of the Lord is clean, enduring forever; the judgments of the Lord are true and righteous altogether. They are more to be desired than gold, yea, than much fine gold; sweeter, also, than honey, and the honey-comb. Moreover, by them is thy servant warned; and in keeping of them there is great reward."

"How pure, how perfect are Jehovah's laws,
From them the soul its best instruction draws;
Truth, virtue, love, and wisdom they impart,
Light to the eyes and rapture to the heart.
Bright is the gloomy cavern's jeweled ore,
Sweet is the roving bee's collected store;
But what can nature, what can art bestow,
Like the pure words that from Jehovah flow?"

There should be no enforced reading of the Bible in schools; nor should its use be prohibited by either state or local enactment. It should be left, as God has left it, entirely free. The perfunctory reading of the Bible in school by a teacher who does not love its precepts, and whose life is not conformed to its teachings, will have little influence for good, if its effect be not positively pernicious. It may even be wise, under some circumstances, for the Christian teacher to refrain from any direct and formal use of the Bible in school. Were I teaching in the country, or in a village, where parents were opposed, as some are, to having their children taught English grammar, I might not consider it best to enter into any contest over the matter, or to spend any time in endeavors to secure the purchase of text-books. The time might be better spent and the end more effectually reached, by teaching grammar without a text-book, and even, perhaps, without calling it by that name. More important than the Bible in school, is its spirit in the heart of the teacher. The child may drink in from the lips of the teacher the thought of the being and love of God, and the knowledge of the duties arising from our relations to him, and to each other; and he may receive, as an emanation from the teacher's inner life and character, an elevated religious spirit. Yet, in communities where no serious opposition exists, the daily use of the Bible is desirable; and my impression is, that the cases are rare in which the truly earnest and judicious teacher meets with any opposition.

But the general influence of the school, and, especially, the personal influence of the teacher, may become more powerful instruments of moral culture than direct moral instruction. The degree of faithfulness and efficiency with which school duties are performed, determines, in a great measure, the moral tone of the school. The standard which the teacher fixes for himself, and the standard he requires of his pupils in the accomplishment of the work of the school, go very far toward fixing the pupil's moral standard for life. The pupil who has been punctual and regular in his attendance at school, and prompt and thorough in the preparation and recitation of all his lessons for the ten or twelve years of his school life, will rarely fail to become an efficient and reliable man or woman.

The discipline of the school may be so exercised as to beget in the pupils the power of self-control, regard for the rights and feelings of others, and hatred of deception and every form of wrong-doing. In the exercise of discipline, the teacher should keep constantly before his mind the highest good of his pupils. With teachers of weak moral character, the first question generally is, How will this or that measure affect myself? what will people think? or, how will it affect my reputation? But with the true teacher, the first and great question is, How will it affect the future life, character, and happiness of my pupils?

The motives to which the teacher is accustomed to appeal, will have great influence in the formation of character. If the pupil's motives be low and selfish, the moral nature will be debased. The incentives set before the pupil should be such as tend to quicken the conscience, and to develop and strengthen the moral nature. There is, perhaps, no other topic so fundamental and vital in education as this, which is so imperfectly understood. It demands our most careful study.

Passing over the cultivation of the habit of faith, and some other topics which suggest themselves, I close with a few words in regard to the personal influence of the teacher. There is, probably, no other moral influence so effective and fruitful as that which comes from the teacher's inner life and character. It has been said, in regard to painting, that "the characteristic traits of the artist, despite his efforts to the contrary, find their expression on the canvas. The master-pieces of Rembrandt have been pronounced coarse and gross, while those of his contemporary, Vandyke, are invariably spoken of as the embodiment of purity and refinement. These individualities are noticeable in their portraits of the same persons." The teacher is an artist, who, all unconsciously, it may be, is constantly transferring to his pupils the lineaments of his own soul. Every teacher exerts on the moral nature of his pupils an influence either good or bad. A silent, unconscious influence goes out from the inner life and character of the teacher, which can not be measured. Some have been so deeply impressed with the thought of the great power of the teacher's influence, as to conclude that all the moral and religious influence of the school which is of any worth, must come as an emanation from the teacher's character and life; and that there is no need of direct and formal instruction. The fact must not be overlooked that the inculcation of right moral principles vitalizes and increases the teacher's moral influence. Precept and example are the complement of each other. The Great Teacher exerted a power of personal influence unequaled by any other teacher of our race; yet he taught, from day to day, and from house to house, the principles of pure morality, and the practical duties of every day life.

This subject is one of transcendent interest and importance. The gravest responsibility which now rests upon the teachers of this country, is the right moral training of the youth of our land. Upon this depends the prosperity and permanence of our free institutions. The only hope of America is in the intelligence and integrity of her people. The declaration that "religion, morality, and knowledge are essential to good

government", connected with the requirement that "schools and the means of education shall forever be encouraged", constitutes the corner stone of our Republic. It becomes us, then, as good citizens, as well as educators, to cherish our free school system. We should protect it, on the one hand, from the blighting influence of godlessness, and, on the other hand, from the unhallowed touch of sect or party.

DISCUSSION OF PRESIDENT FINDLEY'S ADDRESS.

A. B. Johnson, of Avondale, being requested to open the discussion, said:

I heartily indorse every position taken in the excellent essay to which we have just listened. In trying to ascertain my line of duty as a teacher, I have been led to reflect very much upon this question of moral teaching in our public schools. I will not say, "moral and religious", as the caption of the essay runs, because I believe that of the moral instruction is what it ought to be in the schools, there are agencies without that will control and guide the other. The teacher occupies a more important position with respect to moral teaching, than we are apt to imagine. It seems to me that there is a radical defect in the moral teaching in our public schools, and also in the church. While the higher forms of religion are being taught and insisted upon, what may be called the lower forms are neglected. There is nothing that is needed in this country more than common honesty. Honesty is so scarce that it is at a premium. Run your eye over the history of this country, and you find but two of her chief rulers on whose honesty there is no discount; and they stand out in bold relief. What was it that gave them such a hold on the hearts of this people? It was common honesty—honesty not on the lip, but in the heart and life. A distinguished English writer said, not long since, that he had attended the English Church for thirty years, and had heard hundreds of sermons, but he had yet to hear the first sermon upon common honesty, or the commandments, "Thou shalt not lie" and "Thou shalt not steal." As far as my own course is concerned, I am little disturbed by the effort to take the Bible from the common schools. I can teach the ten commandments and that which Christ added thereto, without the Bible. They can be impressed by example and precept and earnest lessons upon the hearts of our children. In a recent examination of a class of pupils, instead of pronouncing a stringent rule against copying, I prepared their minds for the appeal whether it would not be better to hand in a slate with every answer wrong than with one mark of dishonesty upon it. Their eyes sparkled as they gave a hearty response, and they came up and handed in their slates with earnest steady looks. The teacher has many opportunities, if he will only seize them in passing, of impressing the importance of honesty, strict and thorough honesty, upon the hearts and consciences of children entrusted to his teaching. Look at the importance of it. Are we not doing a better thing for a boy when we impress upon his mind those principles that will guide him to the development of perfect

manhood than when we teach him the rules by which he may successfully conduct a business? We should embrace every opportunity to impress upon children the priceless value of character, that the greatest hero is the moral hero, the man who has complete mastery of himself and has every passion under control,—that he only is the perfect man. In moral teaching we have this advantage—God has impressed his own law upon every little heart.

EDWARD F. MOULTON, of Oberlin: I can not let this opportunity pass without saying that I am glad that the time has come when one of our prominent superintendents is willing and not afraid to come before this body of superintendents, and express the sentiments that have been expressed this morning. I believe that we, as teachers and as superintendents, are neglecting the higher part of the culture of our youth. Horace Mann has said that if we take a boy and develop him physically, leaving out entirely his intellectual and moral nature, we will make a perfect animal. If we take the same boy, with this physical training, and add intellectual culture, leaving out entirely moral culture, we will make an incarnate devil. But if we add to this physical and intellectual development, right moral culture, we will make an angel of light. I believe this; and I believe that we can not make even a good citizen without moral culture. We can not make a true citizen, or a true man, if we leave out the moral part of his education. I indorse the whole essay, and I do not except the "religious." I do not believe there is any moral culture without religion. I believe that we learn all that we know of morality from what we have learned of Christianity and from Christ. Where shall we go to learn of justice, but to the Bible? Where shall we go to learn what is the right, but to the Bible? Where shall we learn of charity and love, but from the Bible? We can not leave out the spirit and the teachings of the Holy Bible, the teaching of Christ. I wish to add that I believe that moral training is a practical thing, because I have tried it. At the beginning of the last school year, we determined to teach morals, just as much as arithmetic and grammar, and we made a place for direct moral instruction in the course of the teacher's daily work. I saw the result at the close of the year. Our scholars stand, all of them, upon a higher moral plane than they ever stood before. Our highest and best work is the formation of character, not the training of mind or of the body; and, if we leave out this moral culture, our work is not well done. I believe that upon the fidelity of the teachers of this country depend the safety of our republican institutions and the healing of the nation.

W. WATKINS, of Dayton: Whether I am in favor of teaching morals and of teaching religion in the public schools of the state of Ohio, depends very much upon what is understood by the terms morality and religion. There is a necessity of exact definition in this matter. I wish to say, in the first place, that, from my own standpoint, I am in favor of a full, direct, and continued course of moral instruction in the public schools. But by this I mean the culture of natural, and not theological virtues. By the natural virtues, I mean, in the first place, all those vir-

tues which pertain to man in his relation to the whole collective body of men. I insist upon humanity as of primary importance in the consideration of morals. That is the very first element of morality, and the first element of goodness. From the first moment of the pupil's entering our schools, onward through the course, I am in favor of cultivating that feeling which is expressed in the words, "Whatever is man is me." In the second place, I am in favor of the cultivation of personal truthfulness in the schools—personal truthfulness which is indispensable to any personal dignity, or personal influence among men. I say cultivate it by all means—by example always, by precept at suitable times; but, above all things, let us be, let us act, let us say and do everything in a strictly truthful manner. Let truthfulness pervade the instruction in our common schools. In the third place, I am in favor of the cultivation in the common schools, as far as possible, of those moral virtues which are required for the social welfare of man, and for the continuance of the race. I think that, as far as possible, our boys should be so trained that when the time comes they shall be good husbands and good fathers; and that our girls should be so trained that they shall be, when the time comes, good wives and good mothers. In the fourth place, I am in favor of instruction in those virtues and in that morality which will favor the individual himself. I am in favor of instruction in honest and industrious work in all grades of the common schools—and if any man or woman can add anything by the force of example, or can add anything by the power of school arrangements or in the way of precept to this, I am in favor of it. I am in favor of the cultivation of those virtues which shall make all citizens public spirited citizens—those who take a part in all the forward movements and progress of the body politic.

These I have given to you as specimens of what I call the natural virtues. They are so called, and so understood. This is the morality that I want to see taught in the common schools. I want to see that; and if this be not sufficient, if this does not cover the whole ground, then let private instruction make it full and complete. If, in addition to this, theological dogmas, peculiar views of the Deity, of the importance or inspiration of Scripture, or anything of this kind, are necessary, then I say let this be given, by all means, outside of the schoolroom. The Jew is found in all the schoolrooms in our cities and also in schoolrooms not in the city, and, as long as the state of Ohio has not decided officially that the Christian religion is true and the Jewish religion is false, then you, Mr. President, and I, in our official capacities as instructors, have no right whatever to interfere with the faith of the parent, and with his indefeasible right to bring up his offspring in the culture and in the faith of any religion which may seem to be true. We dare not—I warn you not to attempt the vain and fatal effort to enforce the religion of the majority upon the minority. I warn you.

W. WRIGHT, of Rushsylvania, Logan county: As a member of this Association of Superintendents, I wish to indorse the noble utterances that have been made by our President in reference to moral and religious instruction in our schools. I can not, in my ignorance, see the

possibility of separating morality and religion. It appears to me that a morality without religion is a house without a foundation, a ship without a bottom, a religion without a God. Let us, for a moment, examine this subject. Let us suppose that you present a moral truth to a boy; that you tell him that he ought to do a certain thing. In a spirit of inquiry, he may ask, "Why ought I to do it?" Your answer is, "Because it is right." But he naturally asks, "What makes it right?" You say, "It is right because our conscience tells us that it is." The intelligent pupil replies, "What is conscience? What is the law of conscience? Who regulates conscience?" You are, at last, driven to answer, "It is right because so constituted by the Supreme Being." You come back to the principle that the act is right because God himself has made it so. There is the foundation of right. If we wish to see the results of natural virtue or natural religion, we can find them portrayed upon the walls of Herculaneum and Pompeii. Now, Sir, if we wish to practice the principles of virtue and truth, we must not rely upon ourselves, but upon a Superior Power, and let us lead the children to the same moral source. This was most happily expressed in the President's address. True religion (beautiful thought) is the voice of God calling upon man to do what is right. There is no sectarianism about that. What a moral foundation is "love to God and love to man!" There you have it all. I find no trouble in teaching Jewish children "love to God", and I see no violation of the conscience in doing this. "Love to man", that inculcates all true honesty, is the foundation of true honesty. Where can we find stronger authority for inculcating love to man than the command, "Thou shalt love thy neighbor as thyself." Where do you find a better foundation for honesty? Where do you find a better foundation for teaching all the rights and duties resulting from the organization of society than the Bible, which is truly the great text-book of all sound morality?

President O. N. Hartshorn, of Mt. Union: I have listened with unusual interest to what has been said upon this question, partly because I feel a deep interest in it, and partly because I think it is the theme of all themes that teachers should take home to the schoolroom. I approve, most heartily, of the President's propositions, with all their qualifications. I have scarcely ever listened to an address that I could so fully indorse with all its limitations. We should have in our schools a positive Christianity, a Christianity above sectarianism, just as we should have a patriotism above partisanship. That teacher that can not go into the schoolroom, and thus teach morality in its life and spirit, is hardly fit for the schoolroom.

Above all, allow me to say, the teacher should aim to do his duty in the fear of God. I have, I must frankly confess, but little sympathy with the views of the gentleman who laid down the five rules of morality, which acknowledge no God, and which recognize no accountability to Him, no providence, no judgment, no future before us,—a morality founded upon policy which teaches simply that it is good policy to be truthful and honest. Unless we believe as the Hottentots believe, we

should not confine our education merely to what relates to this life. Our government is based upon the Christian religion, though it tolerates all religions. It is a Christian government, and we must teach a Christian morality, if we would remain intact as a government.

I do not believe in enforcing Christianity in the schoolroom, nor do I say that we should enforce the reading of the Bible there. But here are the Christian principles: "Thou shalt love the Lord thy God with all thy heart, and thy neighbor as thyself." We should not stop short of this.

R. W. STEVENSON, of Columbus: I do not believe that we can arrive at a solution of this question by discussion. There is probably not a member of this Association, who is not in favor of teaching morality and religion in the public schools, and I would leave this question just where the President, in his able inaugural, would leave the Bible. He would not legislate the Bible into the schools nor out of them, nor should a teacher be required to teach morality in any particular way. He should be left free to teach it according to the convictions of his own conscience. A great deal of the discussion upon this subject is without much benefit. We go home and teach just as we see fit after all. One gentleman stated that he had a fixed time in his schools for teaching morality. I do not believe I could succeed in that way, spending half an hour in the morning or half an hour in some part of the day for the special purpose of giving my pupils moral lessons. The only way in which I could teach a true morality—faith, hope, charity, love to man and love to God—is by letting it permeate every lesson. My friend, who has given his experience, may use this plan successfully, but I know I could not. Others might, perhaps, use it successfully, but others would make a failure of it. There was a gentleman here who made this remark (I have it second handed), that, on visiting the schools of Germany, he found that much time was spent in teaching religion—perhaps one-fourth or one-third of every day,—and yet he was satisfied that the children in the German schools had a great deal more religion in the head than in the heart.

JOHN HANCOCK, of Cincinnati: This is one of the great and difficult problems, not only in education, but in society, and it becomes every one who speaks upon it, to do so with great caution and prudence. We can not prescribe a course of moral instruction for the whole community; we can not say, "Here is absolute truth; I am possessed of it, and that is the thing that must be taught in your school." The question has been discussed for years, and we have not reached any settled and definite conclusions with regard to the *matter*, and we shall never come to a definite conclusion with regard to the details in teaching morals. You must remember that these public schools are only possible for the state on the theory that they are necessary to the existence of the state, as a means of training citizens. The instruction that is most valuable to the state, as it seems to me, is that kind of training which the child may receive from day to day in the public schools. I do not greatly concern myself in regard to the moral training of a school, if there is at the head of it a man or woman thoroughly imbued with moral ideas. I

know that school will have a healthy moral influence without even a settled plan of moral instruction. Children can not attend a well-regulated school day by day, without learning habits of order and punctuality, and they can not go through its examinations without learning and living that great principle of honesty, which my friend, Mr. Johnson, has so well described. And this kind of growing into moral habits is worth more, it seems to me, than simply conning propositions of morality. Every school that is well governed—and if not well governed, no moral instruction is possible—will give moral training of the most valuable kind to American citizens. But I think we ought not to stop here. There is something beyond all this, valuable as it may be. There is something in the child's nature higher than all this—a certain spiritual force that ought to be reached, that must be developed for the safety of the state. It is absolutely necessary to the preservation of society, as it seems to me, that we should have a reverence for the Being above us,—that we should have a thorough faith that there is something above and outside of us higher, grander, nobler than we can be, and upon which we are dependent. I have no question as to the necessity of such recognition as this to the well being of society, and yet I would not have the public schools of the country try to enforce my views upon any living creature. The highest doctrines are not to be enforced by legislative enactment. The state can prescribe no form of religious instruction in our public schools. While the schoolmaster, who is but the servant of the state, can not properly enforce any religious form or doctrine in the schoolroom, he can recognize those grand principles embodied in the Christian faith and Christian doctrines, the noblest faith and the noblest doctrines the world has ever produced. I merely rose to say that we may believe that the religious doctrines we hold are necessary even to the preservation of the social fabric and the best interests of men, but we must be careful how we prescribe these doctrines for others. A noble liberality is the highest offspring of the Christian religion. It has its very root in this free liberality, in that charity for those who differ from us in opinion.

PRESIDENT FINDLEY: Allusion has been made to the difficulty of imparting religious instruction to the Jews in our public schools. This would seem, theoretically, to be a difficult matter, but experience and observation have taught me some things in reference to it which theory never taught me. I have taught in several cities in the state, where I had a large number of pupils of this class. I taught five years in Cleveland, in a part of the city where the Jews were perhaps as numerous, if not more numerous, than in any other part of the city, and I believe that no teacher in that city, or perhaps in other cities of Ohio, made a freeer use of the Bible than I did there. I freely read it and freely commented upon what I read. I read frequently from the New Testament, and in the morning I led the school in voluntary prayer, and I never yet had an objection made by a Jew, save perhaps one. A little girl once, in time of prayer, when all were bowed, sat upright—though she had always bowed with them before. I spoke to her about it, and she said pleasantly, "We don't believe as you do." "I know you do

not", said I, "but if you would just as lief, I would a little rather you would do as the others do; however, if your parents do not wish you to bow in prayer, you need not." That was all I did, and she afterward bowed her head, as the others did, during prayer.

In Akron, the Jewish rabbi who taught German in our high school, came in one morning at our opening exercises, and ever after he came in quite regularly. He afterward spoke of it, and said, "Your religion is a nice religion. I wish I could believe it." I wish to mention but one other incident. A member of the board of education for my ward in Cleveland was a Jew. One morning he came into my school just as I opened the Bible. I had opened to the New Testament. My first impulse was to turn over to the Old Testament—his book. But upon second thought I concluded that this would not be best, and I read the lesson I had selected in the New Testament. He sat and listened attentively, remaining through the opening exercises, and I never heard of his uttering a word of objection. If this matter is judiciously managed, there will be no trouble with the Jews.

R. McMillan, of Youngstown: My experience corroborates what our President has stated in reference to the apparent difficulties attending this subject. The objections I have met, have not come from Jews or disbelievers in general, but from professed believers. [A voice: "There's the trouble."] There are those who are so afraid of offending the Jews that they raise an objection to the repeating of the Lord's prayer. I have seen an election contest on this question, and every Jewish vote was recorded against excluding the Scriptures from the schools. Not long after I asked a Jew how it was that they had thus voted upon the subject. Said he, "We do not object to your religious instruction. We have our views, and we are not afraid of your hurting our children, for we teach our children religion. Your religious instructions make our children morally better."

One of the members of the board of education where I taught several years ago, was a professed infidel. I wished to discuss this subject with him, but he said, "Don't say anything to me about it. Your religious instruction makes children more moral." I was once associated with an infidel teacher in a high school, who absented himself from the room during the opening exercises. In the course of a few weeks, he took occasion to say to me: "You may suppose I am very much opposed to those religious exercises, but I am not: I wish them continued. I feel the influence of the reading of the Scripture from day to day, in my schoolroom, and I wish it to continue." So I say that the opposition of which we hear so much, does not usually come from Jews or infidels.

On motion of John Hancock, R. W. Stevenson, of Columbus, J. C. Barney, of Warren, and A. T. Wiles, of Zanesville, were appointed a committee to nominate the officers of the Association for the ensuing year.

The Association adjourned to meet at 2½ o'clock P.M.

Afternoon Session.

The Association met pursuant to adjournment. In the absence of the secretary, John McBurney, of Cambridge, was elected secretary *pro tem.*

The Committee on Nominations reported the following gentleman as officers for the ensuing year:

President—R. McMillan, Youngstown.

Secretary—E. F. Moulton, Oberlin.

Executive Committee—A. B. Johnson, Avondale, H. M. Parker, Elyria, W. Watkins, Dayton.

The report was received and adopted.

M. S. Turrill, of Cincinnati, read a paper on "*The Percentage System*", as follows:

THE PERCENTAGE SYSTEM.

BY M. S. TURRILL, CINCINNATI, O.

Assembled here as an Association, desirous to advance the interests of education by exchanging our thoughts on whatever may interest the profession, some may prefer for discussion "Faithful Examinations", "Normal Schools", "Teachers' Institutes", "County Supervision", and other kindred topics, not even omitting a few thoughts on "the righteousness of a regular yearly increase of salary", but to me has been assigned a very different subject, *the percentage question*, one remote, I think, from the usual conventional track, yet to a certain extent deemed essential by our public schools.

A few years ago, perhaps fifteen, a scholar of mine removed to Cincinnati, and there attended school during the memorable and stirring administration of Supt. A. J. Rickoff, whose many educational reforms, then originated and adopted, have so intertwined and incorporated themselves in the Cincinnati system of graded schools, as to have rendered practical service and permanent good, in that work of ours where results end not with terms or quarters or school years, and possibly not with life itself. I was then cautiously groping my inexperienced way, in a small school in an adjoining village, dependent for theories on Page, Northend, and an occasional seasonable suggestion from the *Ohio Journal of Education*, and for practical illustrations, on frequent visitations to the Cincinnati schools, familiar conferences with teachers, and conversations with scholars there in attendance.

One day I met this scholar, and knowing him to possess rather superior attainments, and to be somewhat advanced in the district school course, I questioned him about as follows: "What book does your class read in now?" "McGuffey's Fifth Reader." "You have been in that book a good while?" "Yes, about two years, and I know it nearly all by heart." By further inquiry, I found him very familiar with the oratorical pieces as well as all the poems of that book, many of which he could

recite readily. He stated that they had been used for declamations and select reading exercises, and I, surprised at his thoroughness in this one study, asked him why he was not in a higher reader. "Well", said he, "I did n't get the *per cent.*" "Per cent", I replied, "What do you mean by that?" He then explained that all the scholars were classified, so that each room or grade had the same studies and recitations; that they were examined by printed questions, and if they did not average 70 per cent, they remained longer in the class, confirming his statement by presenting me with some of the self-same printed questions, showing me what ones he had missed, and which he had correctly answered at a previous examination.

This was to me something new. No such mechanical educational appliance had ever been suggested to me before during my school experience. I first considered the questions critically. Who made them I do not now know, but some were rambling in their application to the subject; some were crude and indigestible; some were for catching purposes and thus entirely impracticable, and some had been taken verbatim from the so-claimed unprecedentedly successful text-books; yet with all their defects I gave them a hearty welcome. Eagerly I made further inquiries to learn the process of using this new lever, that I might lift my school to a higher plane of usefulness. Patiently I waited for another Cincinnati examination; gladly I obtained the questions, and, by a few verbal changes, I adapted them to what I had been teaching, and with them made my first experiment in a percentage examination. The effect produced was astonishing. I saw I had hardly begun to realize the importance of the work. From it I could make a more systematic and perfect classification of my school, arouse the scholars to the need of efficient preparation in their studies, call the attention of teachers to portions of the course neglected or accidentally overlooked, increase the thoroughness of the instruction, and reach results by this tangible tabulated plan which I had never before attained.

The percentage system, then in its infancy, has since grown rapidly into public favor, and is now a prominent feature successfully used in the practical management of our best graded schools. The manner of using it is somewhat as follows: Classes having completed a portion, or all of a defined course of study, a certain number of test questions are prepared and written on the blackboard, or printed on single slips, the scholars being placed so as to be entirely isolated from each other, and books, maps, and all other helps are removed, answers are covered as soon as written, finished papers are immediately brought up, errors are marked, and a percentage value given; the amount is recorded, and an average made of the combined percents of all the branches; each scholar is ranked and re-seated; each makes a copy of the percent sheet and takes it, with the questions, home, that his parents and friends may have a full understanding of the whole process, and become more clearly acquainted with the schoolroom work.

For ordinary review, a plan frequently used, is that each pupil prepares five or ten questions, different from those of any other, on a cer-

tain portion of the course, writing them the day previous to recitation, on rectangular spaces blocked off on the blackboard, that all may study every question, and be prepared to answer any set. When the recitation hour arrives, each one, not knowing previously what he will have, is required to write the answers to some other set than his own; then slates are exchanged, and each one examines and marks the percent of a third set, being the answers of neither the questions he made nor those he answered; cases of doubt, such as answers partly completed, are decided by the teacher; then slates are turned; results announced and mistakes corrected, and the important questions missed, recorded for future reviews.

Many years' experience in teaching has convinced me of the need of some such a system, in regular instruction, in conducting reviews, and in ascertaining results. As no intelligent view of what a pupil or a school is accomplishing can be ascertained and conveyed to others, except by some standard of marking, that standard which critically considers the branches taught, revealing at a glance the condition of the school from time to time, on a mathematical scale, is most certainly to be preferred. Without such a system, good teachers are not satisfied with their labors; with it even teachers of average ability may attain a fair degree of efficiency. To a great extent it obviates the complaint frequently heard even among the most wise and thoughtful of educators, that much of the moneys expended upon schools is but little better than thrown away. The school terms are short, the cheapest teachers are employed, there is little or no system, not any supervision, the instruction is smattering, superficial, or sensational, reports are meager and blundering, and the chief objects seem to be to put in the time and pocket the parsimonious and begrudged salary.

Though a judicious use of this system may not remedy or remove all these defects, yet it will bring method out of chaos, reanimate the dullness and apathy of the schoolroom, and awaken more than a passing interest even in localities where directors and parents have been considered far beyond the converting grace of an educational revival.

That there are objections to its use, we freely admit; and though they may come, and generally do come from those who have not achieved the highest success as educators,—the majority being managers of select or private schools,—yet we must not be unwilling to examine logically existing doubts, and candidly accept the conclusions derived from the facts of experience.

Some object to it, alleging that though it may show absolute results in some branches, it does not, in any case, show the mental power gained by those results. Others aver that it has not met the expectations of its earliest and most earnest advocates, and that in some instances where enthusiastically supported at first, it has since been only occasionally used, or entirely abandoned. This opposition comes from those who do not approve of using any extra influences to urge scholars to progress beyond their natural inclinations. They call it a forcing system, a hydrostatic-pressure system, a frightening-away-from-school system, unjust

mentally, injurious physically, unworthy educationally, and, as I lately heard an unsuccessful examiner say, "an abomination morally."

Giving all such assertions their reasonable weight, we can not see that motives of competition, hopes of high rank, and success resulting from the faithful performance of duty, are improper incentives in our work; and these certainly are the chief constituent elements of the percentage system. Instances of failure are occasionally offered also as objections, as though isolated cases of ignorant mismanagement or unfavorable circumstances, could offset numerous instances of success resulting in a permanent good.

The principal objection to the system in our large cities is a carelessness by some in carrying out its details, by which success alone can be obtained, or else the carrying out of too much detail in studies where a just method of marking may not yet have been invented. In mathematical branches, memoriter lessons, and some language studies, the arrangement for obtaining results by this system is almost perfect, but with reading, penmanship, and composition, opinions are more diverse; and a lack of judgment in applying the system to these, has furnished the chief arguments offered against its use.

It is also proper to state that much of abuse is due to ignorant and irresponsible committees, who will mark their fifty compositions, or three hundred papers of penmanship in an hour, and even vary twenty-five per cent on the same scholar's reading in two successive trials, and yet think (but certainly not from an educational standpoint) that they have done the right thing, and that teachers should thank them for their faithful uncompensated labors—being too obtuse to perceive that the whole mental atmosphere, except in their immediate presence, oftentimes resounds with uncomplimentary, yet intensely just comment on their brilliant bungling. Rather thank them to let alone, what they so vaguely understand, in attempting to fix the intellectual status of those examined.

Some assert that instruction, depending on such a system for tests, can never communicate the highest learning, or cherish the power of independent thought. Rather do we think that the lack of that systematic and thorough instruction, and that knowledge fixed by reviews is never compensated by any mere course of study, no matter how judiciously planned, or assiduously followed, for the work assigned can not otherwise be so thoroughly probed and dissected, and all the deficiencies and weaknesses of each pupil's acquirements be made so conspicuously manifest as by this,—the merit of the system being to wind up and bring to a point all previous training,—and thus it is made an *incentive to study* reaching alike every member of a class, an *inspector of material*, allowing no improperly prepared scholar to enter a grade, and a *measurer of work*, by which the teacher's faithfulness and thoroughness with a course of study, is positive and unmistakable.

Its adaptability has made it popular with graded and high schools in fixing terms for admission and promotion, with boards of examiners in giving and grading teacher's certificates; and even with the Civil Ser-

vice department by arranging in a somewhat singular way, conditions for the acceptance and advancement of applicants.

While we would not advise boards of education and superintendents and principals of schools, to place too much dependence in mere percents alone, or attempt to make the system a substitute for other good appliances, if there are such, we would suggest the investigating and adopting of whatever plan will arouse, stimulate, and successfully develop qualities and traits, that will redound to the general welfare of our schools. It or any other system, to have its excellencies developed, and its usefulness employed where it can accomplish the most good, must depend at last on its steadfast friends and faithful workers, in addition to any intrinsic merits it may of itself possess; and we look in the future for improvements discarding every defect and superfluity, and may it so far surpass its present worth as to continually re-adapt itself to our actual wants, and thus represent our scholars precisely as they are, and render to teachers that justice which they merit, but which they seldom receive.

DISCUSSION OF MR. TURRILL'S PAPER.

W. D. Henkle, of Salem: In all sciences, results or calculations are made on an average. When an astronomer makes his observations, he is not satisfied with one, but he makes a great many observations and takes the average, so that if any disturbing cause should come in, it would not be fatal to his calculations. The more observations that are taken, the better satisfied will he be that his deductions are correct. Now in order to make examinations effective, they must not be conducted in the old-fashioned plan, with a grand flourish of trumpets at the end of the term, but they must be conducted frequently throughout the year, must be repeated, and the average of all these examinations must be taken. Instead of one examination in arithmetic or grammar, for example, there should be some ten or fifteen examinations in the year, and the percents of these different examinations added together and divided by the whole number of examinations, will give a more correct estimate of a pupil's knowledge than can possibly be obtained by any one examination. The more examinations we have to average, the surer will we be to get correct results. I agree with the author of the paper, respecting the great value of the percentage system, especially if the examinations are made so numerous and extensive that disturbing causes will be eliminated.

The results of an examination depend much upon the character of the questions used. If the teacher, who knows exactly what the pupils have learned, proposes the questions, his course will be determined more or less in reference to this; but if the questions come from the superintendent, who has but seldom heard the recitations, they will be an examination of the teacher as well as of the class. Such questions will be suggestive to the teacher. Sometimes the teacher will say, "I did not teach that; I skipped that." "Well, you ought to have taught

it, and here you have, as a result of your neglect, this low per cent on the part of your pupils." An examination should hold the pupils to a knowledge of the subject. In the examination of a class in geography on the map of South America, for example, I would require them to answer any question which the map will answer, whether the teachers have ever asked the question or not, or whether it is in the book or not. I sometimes ask dozens of questions in geography that the teachers never propounded, but if the pupils have the map in their minds, with the relation of the various parts, they will be able to answer readily the questions asked. I remember one teacher that sharpened her pupils by requesting each to make every day a question on the map as a puzzle to other pupils, and the results of the examination of her classes was remarkable. Nearly every pupil got one hundred per cent. Scarcely a question could be asked upon the map that was not correctly answered. I do not know that it is proper to take an average of the pupil's percents on different studies or subjects in making an estimate of his standing. Sixty per cent on problems in algebra, that he has never seen before, may be more than equivalent to ninety per cent on some other subject. There is an ineqality in the different subjects which the average does not show.

We give our pupils in Salem what we call an annual report, which denotes their rank and per cent, and on this report is based their admission to the school the next year. On one part of this report is a table showing the attendance for each term of the year. On the right side is another table showing the pupil's standing in the branches studied. In the first column the average per cent is given, and in the next column, the number of examinations. If the average was obtained under a great many examinations, the more correct is the average. The next column is the percent rank; that is, the pupil's per cent in reference to other pupils in the class. If he had the highest average, he ranks *one*, next highest *two*, and so on. The next column is the attendance rank. If he has been present at every examination, he is ranked *one;* if he has missed one, he is ranked *two*. From this report, showing attendance, per cent, percent rank, number of examinations, etc., I determine where the pupil ought to go next year, and I mark the school on the corner of the report. When a pupil's average is rather low owing to a low attendance, I ask the opinion of the teacher with reference to his promotion. We have no prescribed, rigid standard, which every pupil must reach. If the pupil is old enough, or entered the latter part of the year, or if other circumstances justify it, he is allowed to go on. Still there is the report with the percentage, etc., giving the proper data for promotion.

Again, these examinations furnish comparisons, which operate as an incentive all through the year. Nearly every day in the year, you will hear pupils' reporting to each other on their way home the per cent they got in examination, and they also report it to their parents and friends. To give you an idea of the work of this kind done in our schools in a year, let me state that I conducted eight hundred and ninety-three examinations last year, the results of which were carefully recorded. These ranged from Differential Calculus down to the Primary grade.

I publish every year what are called *Examination Honors*, limited to three in every class. The first honor in each class is awarded to the pupil who has the greatest aggregate per cent, taking all his branches together. This brings in the element of attendance. I am satisfied that this percent system, with all its imperfections, is a great incentive to diligence. It is but an approximation to the truth, as all averages are, but it represents the thing a great deal better than a confused idea in the mind. Some pupils who do not recite well, do very well when the stimulus of an examination comes; and there are other pupils who always recite well, but when the examination comes, they fall below. When a pupil of this kind gets a lower per cent than the rest of his class, if he recites his lessons well and never drags, I would send him ahead. When all these things are taken into consideration with the average per cent, we come nearer meeting out justice to the pupils.

JOHN HANCOCK, of Cincinnati: In this matter of examinations, we have never attempted to include the different values that ought to be attached to the different subjects taught in the school. It is very evident that, in estimating the scholastic attainment of a pupil, it is not quite right to attach equal value to studies of unequal difficulty. Ninety per cent in geometry ought, it seems to me, to be estimated as of more value than ninety per cent in geology, for example, and other branches of the same sort, or, as Mr. Henkle has mentioned, ninety per cent in spelling ought not to weigh as much as ninety per cent in arithmetic. If we should introduce into our system of estimating scholarship by the percentage method this other element, we shall come nearer to the true value of the pupil's attainments than is now done by estimating all branches alike, and taking an average by dividing by the number of branches. It might be well, in order to incite interest both on the part of the teacher and of the pupil in certain neglected studies, as composition, to give, for a time, a comparatively high value to them. This would give a lever for elevating the standard of scholarship, that shall be flexible, varied at times, yet, after all, giving very much more nearly the correct estimate of the pupil's attainments and scholarship. I believe that this is done at West Point; I do not know that it is done in any other institution. It seems to me that it would be a valuable thing to introduce into public schools, where the percentage system has a fixed and definite purpose. As was stated in the paper, the value of the examination will depend very largely upon the sort of questions, and most of the objections to the whole system which I have seen, have been based upon instances of very poorly prepared questions, questions that ought not to have been given to any class of pupils. The questions, as has been said, may be made very suggestive to the pupil, and to the teacher also, and, for the reason, they should be prepared by one who does not teach the class examined. They may show a better method of teaching the subject than the teacher has hitherto pursued. The essay read this afternoon seemed to me to present the advantages of the percentage system in a complete and logical manner, and I am willing to rest my belief in its value upon that essay.

W. WATKINS, of Dayton: Have we not been a little too technical in reducing everything to absolute percentage, thereby depriving ourselves of the benefit of the sliding scale, Mr. Henkle has just advocated? Would it not be better, instead of making examinations all depend strictly upon percentage, to grade the studies into two or three different classes, with separate estimates that the pupils should understand? Thus studies which are exact and severely intellectual might be graded upon the present system, the scholar understanding that one hundred per cent was the highest grade he could obtain in arithmetic, algebra, or geometry; but also distinctly understanding that one hundred per cent could not be obtained in spelling, or in local geography, for instance, or in any other branch in which the memory is principally exercised. We could then make a percentage, counting the aggregate of the numbers the pupil had received. One of our pupils might obtain 5,800 on the examination as the sum of his numbers; another one, on this system, might get say 5,700 or 5,000, each getting less than the preceding one, and the merit might be graded in that way. It seems to me that the technicality with which we are running everything into percentage, is the source of one little weakness we shall do well to guard against, if possible.

The above discussion was followed by the reading of a paper on—

STUDIES, THE PURSUIT OF WHICH THE STATE SHOULD ENCOURAGE.

BY THOS. W. HARVEY, STATE COMMISSIONER OF COMMON SCHOOLS.

The state has assumed the responsibility of providing means and agencies for the education of its youth, or of sanctioning their employment by legally constituted authorities. It can not, with safety, leave the moral and intellectual development and training of those upon whom the duties of citizenship are soon to devolve, to the uncertainties of chance or to private enterprise. It must *know* that agencies adequate for this purpose are employed, and should have power to control and direct them; for its existence depends upon their character and the mode and extent of their employment. Hence, the establishment of a system of public instruction becomes a duty which the state owes to the citizen, and the kind and amount of the instruction necessary to be provided are proper subjects for legislation.

The inquiry at once suggests itself, "What is the education which safe citizenship requires, and which the state must provide to give security and permanency to society, and to lay the foundation for individual as well as national prosperity." This is an important question, for its answer will necessarily indicate the principle that should govern in the organization and classification of public schools, and the amount of scholastic training the citizen can justly demand as a legal right.

The duty of the state to educate is founded on the necessisy of education as a means for securing national prosperity; the character and extent of this education must be determined by the nature of the being to be educated and the needs and requirements of the government to which he owes allegiance. The wants of the individual as an individual vary but slightly in all climes and among all races—the needs and requirements of the state vary greatly. As a general rule, those endowed with sovereignty ought to be taught the duties and responsibilities of sovereigns; those who are to be subjects only, the duties of subjects. In our country, the people are both sovereigns and subjects. The right of suffrage is universal, or nearly so, and the door to preferment is wide open to all who seek official position even the highest. In a state thus organized, education should not only be free and universal, but must, if it accomplish its intended purpose, be adapted to the peculiar circumstances that surround each citizen—an education limited only in fact as in theory, by capacity for development and culture, and by considerations of state policy, financial ability, and expediency.

Man has a moral nature—a moral sense. Its culture is a matter of vital importance to the state, for its neglect may result in national disaster. Any system of public instruction which fails to make provision for this culture, must be defective, and any system which makes it a prominent feature, lays a broad and firm foundation upon which to build a superstructure of noble, manly individual and national character. During the period in which habits are formed, our youth should be surrounded by the best moral influence, and be taught at home and in school to heed the demands of the moral law. This instruction, also, ought not to be fitful, fragmentary, but continuous, thorough, systematic, and confined to no one class.

Man has a religious nature. While the state ought not to give a particular direction to the develpment of this nature by teaching the peculiar creed and dogmas of any one sect or denomination, it may teach those cardinal doctrines of religious belief which are received as truths by all denominations. Such instruction is not of a sectarian character, and can, with propriety, be given in non-sectarian schools. The church, however, though not sustained by the state, is protected by it, and to it belongs the special duty of caring for the spiritual well-being of man.

The state needs for its material prosperity alone, a race of strong, healthy men and women. Inability to perform any of the duties of citizenship through ill-health which may be guarded against, habitual violation of hygienic laws through ignorance, are matters of grave state concern. Our youth should be taught how to live wisely, that their strength be not wasted ere they reach the half-way station from the cradle to the grave, and their moral sense ought to be so quickened that they will regard avoidable disease as a crime worthy of punishment. It is not claimed that every citizen should be a physican in the technical sense of that term, but that our common schools ought to be so organized and conducted that health shall not be endangered and disease contracted in them; that those elementary facts and principles of physiolo-

gy which the young can learn and comprehend, should be taught in them; and that the observance of hygienic laws ought to be advised, and, as far as is consistent with individual liberty, enforced as a duty owed to self and the state.

In all callings, he whose eye has been trained to close and accurate observation, whose ear catches and discriminates sounds readily, whose voice charms with the richness and purity of its tones, whose hand is, as it were, a second intellect, so swift its movements and so great its cunning, is most useful as well as most successful. Modern civilization is a hard taskmaster, and a pitiless, merciless critic. It requires each one to see, to hear, to do, halting not, hesitating not, or to fall out of the ranks, perish by the wayside, or be a mere camp-follower. The world sweeps past all who can not or will not keep step with the times, for it can not afford to wait for laggards. It has no respect whatever for a locomotive fired up, but lying off on a switch. Many and multiform activities surge around us. They buoy us up, provided we understand them, and are able to adapt our movements to their force, drift, and tend; they overwhelm us if, in our self-complacency, we stand still, and endeavor to check their speed or to turn them from their course. Whatever training of eye, ear, voice, or hand, this civilization requires as preparatory to apprenticeship in the industries which it fosters and encourages, the state should furnish its youth. A system which does not provide this traininy, is radically defective and incomplete.

The education and discipline of those faculties of the mind whose right use is essential to success in life, require the employment of many agencies. Their character, as well as the manner of their employment, calls for a somewhat extended discussion.

Our youth must learn to read; otherwise, they will never possess the readiest means for culture. They must learn to write—to represent the spoken word by written characters; otherwise, they can not transact business with readiness and accuracy. They should be trained to state facts and express thought in choice, forcible language, both with voice and pen, to keep a record of business transactions, and to draw up business papers in legal form. The right of the state to make provision for culture of this kind is questioned by no one, and hence its importance need not be discussed.

The use of numbers in simple and complicated calculations, is, in practical life, almost an hourly necessity. Inaccuracy in their use leads to misunderstandings and litigation, and success or failure in business depends largely upon the correctness with which they are employed. The farmer, the mechanic, and the professional man need mathematical knowledge for its practical value alone, aside from any value its acquisition may have for disciplinary purposes. It is pertinent to inquire, in this connection, "Is there not a definable point, in a course of mathematical studies, beyond which they become practically useful to a few only? If so, what is elementary mathematical instruction?" It is difficult to answer these questions, for all do not attach the same meaning to the phrase "practically useful." It is certainly safe, however, to

affirm that the study of arithmetic should not be restricted to the learning of the application of a few rules useful in buying and selling, in paying out and receiving money, and in the simplest mathematical calculations which a farmer, mechanic, or professional man may ordinarily be required to make. It should include an investigation of the principles which underlie processes, and of which rules are the statements. Facts, however true, are of no great value of themselves. It is the use made of them in generalizations which gives them a value. The teaching of numbers, therefore, ought not to be limited to the mere application of arbitrary rules, but must include the statement and comprehension of the general principles of which rules are the expressed formulas. In other words, general arithmetic, or algebra, must not be excluded from a complete curriculum of popular mathematical studies. If it is excluded, our youth will never acquire that practical knowledge of numbers and their relations which the common school seeks to make universal.

A knowledge of form and of the relations and combinations of visible quantity which constitute form in material things, is of great practical value. We reason concerning the objects of this knowledge every hour of our waking life, and act with reference to the results of our reasoning. Ignorant of appropriate terms to use in the expression of our thoughts and conclusions, we are liable to be misapprehended and misinterpreted—unacquainted with the logic mathematicians employ, our judgments are frequently crude or erroneous. This knowledge is eminently practical and elementary, for it involves a clear understanding of the form, size, and quantitative relations of the things we see, handle, and use or misuse nearly every moment of our existence. A fair critic will confine himself to the discussion of the methods best calculated to impart it, and not indulge in an indiscriminate denunciation of those who would make it popular. The truth is, geometry should be classed among the elementary branches of study, and, therefore, the means for pursuing it should be denied to none.

It may be objected that the technical terms of this science are arbitrary, and that to learn them and their use not only requires time but effort such as a child can not put forth. But are not all scientific or technical terms arbitrary? Does not the acquisition of knowledge of any kind require time? Snaffle-bit and surcingle are technical terms, quite as arbitrary and as difficult to define and remember as catenary and ellipse. The measurement of an angle or the diameter or a circle is not a greater feat for a child to perform than learning to spell a list of a score of new words, and a triangle or a square is not more difficult to describe than a penknife or a rocking-horse. Words are things. The larger the list of names for common objects one has at command, the better. As each new name is a new word, to be studied and remembered as a separate, individual thing, it matters not to the learner whether it be an uncommon word, or one already known but modified in its meaning, made a new word in fact, by a distinguishing prefix or suffix. Disguise it as you may, it is still a technical term.

It is admitted that the mental discipline secured in acquiring a knowl-

edge of elementary geometry is not so great as that obtained by the study of the higher mathematics, but it is similar in kind, and ought not to be despised as worthless. Mental discipline must have a beginning, although it may have no end. Its roots reach down into real things—and every thinker knows that, without a vocabulary of words as names for these things, ready for use in every emergency, continuous thought, the first step to be taken in obtaining this discipline, is an impossibility.

We are surrounded and acted upon by forces. We contend with them; we employ them as our servants. We can not destroy, but we can, within certain limits, control and direct them. The laws by which they are governed, are inexorable. Action and reaction will be equal, but in opposite directions; a pound weight will balance a pound weight, and no more; the world will revolve on its axis, in spite of theory, experiment, and dogma. The movements of the universe are controlled by laws. We can witness the effects of these laws; we can adjust mechanical contrivances to utilize them in industries. Is it not fit and proper that our youth should be made acquainted with them at an early age—especially since experience has shown that they delight in experiments which demonstrate their existence and illustrate their application? Is it not the dictate of common sense so to arrange the exercises of our public schools as to give to those who are to be our future mechanics that knoweledge of these forces which is so essential in mechanical industries, even though our fathers did not see fit to class physics, or natural philosophy, among the common branches of an English education?

Although systematic botany, the scientific classification and nomenclature of plants, is not, strictly speaking, an elementary science, our youth should not be unacquainted with the names and uses of the parts of a plant, with the terms descriptive of peculiarities of form and organization, and especially with facts relating to growth and cultivation. When instruction of this kind shall become general, the extravagance and wastefulness now so much to be lamented will be checked, and one generation will not hand down to the succeeding a heritage of devastated forests and impoverished homesteads. Aside, then, from the æsthetic value of this study, considerations of political economy urge the propriety of numbering structural botany among elementary studies.

It seems needless to say that geography in all its departments, instead of being studied less than it is, ought to be more systematicrlly taught, its main features made more prominent, and its details more carefully worked up. Those confined by necessity or choice to the narrow limits of their county or state should be afforded more than chance glimpses of the lands that lie beyond the horizon's rim. Methods of instruction based on philosophical principles and improved means of illustration, will soon render such glimpses possible—the sooner, the better.

These few branches of science have been selected as illustrations of all the practical branches. The reasoning which is applicable to them, is applicable to all the rest. They should not be excluded from our schools; but their teaching ought to be encouraged by all who would make the

common man intelligent, thoughtful, progressive. The outgrowth of the knowledge thus disseminated, will be thrift, economy, and national prosperity.

The events of the past few years have shown the imperative necessity of popular instruction in political economy and civil polity. The relations of capital and labor are not understood by either our capitalists or our working classes. Hence the endeavor of each to overreach the other. Manufacturers clamor for cheap labor, ignoring the fact that an overcrowded labor market means extremes of social condition inconsistent with republican institutions. Workmen resort to strikes alike calamitous to themselves and the public generally, not realizing that the laws of supply and demand govern the labor as well as the produce market. Intelligence in both classes can alone effect an adjustment of seemingly conflicting interests, and protect each in the enjoyment of its rights. Political economy, as every well-informed teacher is aware, is not too abstruse a study for youthful minds. Its leading facts and principles have been taught in the primary schools of other countries; why not in ours?

Civil polity, and in connection with it the history of our country, have been neglected too long already. Our youth ought not to graduate from the "people's colleges" ignorant of the organic laws of their state and nation, and of the leading facts in their country's history. It is a truth, nevertheless, that the graduates of many of our universities, even, are better fitted by the studies they have pursued for citizenship in some ideal Greek or Roman republic or empire than in the land of their birth. The sensitiveness of politicians may keep these branches out of the schools some years longer; but the day is not far distant when in a republic, as in a monarchy, the duties of the citizen and the responsibilities of citizenship will form an all-important part of public instruction.

While metaphysics may not be taught the very young, they can watch the movements of their own minds, make a diagnosis of their own intellectual condition, and be taught to observe the laws of mental hygiene upon which their intellectual health depends. They can study psychology, so far as it relates to the constitution and movements of their own minds as pictured in consciousness. There will be fewer mental dyspeptics when this science shall be regarded with more favor by our so-called utilitarians, and men learn to distinguish between the science of the mind and the visionary, impracticable theories of some of its professors.

All reference to the study of ancient and modern languages has been purposely avoided in this discussion. They may be regarded as indispensable in language culture and intellectual development by some, and with good reason. Their value as educational means can scarcely be over-estimated. In my judgment, they should be optional studies in the public schools; and while I believe every student should know something about some language besides his own, I would not include any particular language, either ancient or modern, among elementary

studies. Let boards of education determine what languages shall be taught in the schools under their charge.

To recapitulate:—The state should provide, or authorize the employment of means and agencies for instructing the youth, (1) in the so-called common branches—Reading, Writing, Language or Grammar, Arithmetic, Geography, and, in addition, Book-Keeping; (2) in Morals and Unsectarian Religion; (3) in those branches of study whose object is the preservation of health—Physiology and Hygiene; (4) in those branches whose object is the training of the eye, the ear, the voice, and the hand—Drawing, free-hand and mechanical, Music, Elocution, etc.; (5) in Mathematics, including Geometry and its practical appliances; (6) in the Natural Sciences and Physics, and so far as they are necessary in their relation to agriculture, the mechanic arts, and foreign and domestic commerce; (7) in Mental Philosophy, so far as its facts and principles can be understood by the young; (8) in Political Economy, so far as it concerns the reciprocal relations of capital and labor, and the known laws of supply and demand; (9) in Civil Polity and History, so far as our own country and its governmental institutions are concerned.

This curriculum of studies will not and can not be pursued by all who attend our public schools. It should not be made obligatory upon all. It hints, however, at the character, and, to a certain extent, at the amount of popular education demanded by safe citizenship, individual enlightenment, and national integrity, permanency, and prosperity. As such, it formulates the minimum of acquirement, which every conscientious teacher should seek to obtain. Although he may never instruct classes in a tenth part of the branches specified or alluded to, he will find frequent occasion to refer to all of them, and thus to excite the curiosity and give direction to the thought and future studies of those under his charge. None of them should be excluded by legislative enactment from the list of studies to be pursued in schools whose establishment is authorized by the state. Whatever encouragement the sanction of law may give to their pursuit, true statesmanship will not withhold. Instruction in most of them will be necessarily limited in amount, and, in most cases, oral, especially in primary schools; but I trust no one of us believes in the heresy that "a little learning is a dangerous thing."

Many, perhaps a large majority of our people, suppose that the state has established and now sustains a system of common schools in which the studies to which reference or allusion has been made, are taught at the expense of the state, *as a state.* Such is not the case, however, in Ohio, or in any other state whose educational system I have examined. The state, as a state, has established and partially provided for the maintenance of common schools. I say "partially provided for", for the provision actually made by the state is, in most cases, insufficient for the support of even our primary and grammar schools. In most school districts, the proceeds derived from the interest on irreducible school funds, from the rents of leased school lands, and from the one mill levy on all taxable property, falls far short of the amount needed to continue the

schools in session twenty-four weeks each year as required by law. Hence local levies are authorized and required in those districts in which the state funds are not sufficient for the support of the schools the required time, under penalty of forfeiture of such funds. In 1872, these local levies amounted in the aggregate to nearly five millions of dollars —about five-sevenths of the receipts of school moneys from all sources. Our high schools, in which the "higher branches" are usually taught, are either sustained by these local levies, or by the proceeds from property donated by benevolent individuals for their support. A comparatively small portion of the fund raised by taxation is used for that purpose; for of the $4,219,563.04 paid teachers in 1872, teachers in high schools received only $321,406.84, or less than one-eleventh of the whole amount, and a portion of this should, without doubt, have been charged to the amount paid for superintendence. The state taxed itself $1,494,588.02 for school purposes—communities taxed themselves $4,933,759.08. The state, then, as a state, does not really maintain even a system of primary schools. It establishes them, contributes in a substantial manner to their support, and legalizes the action of communities in their efforts to make them efficient—that is all. It is, therefore, a fact worthy of special consideration, that our schools are, in fact, the foster-children of the people; their establishment, though sanctioned and, to a certain extent, required by the state, being left to the people, nearly three-fourths of the expense attending their support being imposed upon themselves by the people, and the studies to be pursued in them determined by boards of education chosen to represent the people, and to care for one of their dearest interests.

In conclusion, I would say that I have an abiding faith in the ability and willingness of this people to guard, foster, and protect the common school—the pride, the boast, the glory of our nation. There may be fluctuations of sentiment in communities concerning the end and intent of education, as well as differences of opinion with regard to the manner in which schools shall be conducted and school affairs administered. There may be dark days in the near future for those who believe that the youth of our state should be taught something more than reading, writing, and arithmetic, and that the minimum of education for the individual is not the maximum of education which the state should furnish. There may be attempts made practically to deny the children of the poor the blessings of that culture which shall make them the equals of the children of the rich in the struggle for preferment and a name. Still, I believe that "free education" and "no class distinctions" are battle cries Americans will never cease to shout forth in the hour of peril and of trial. I have faith in the sturdy common sense and honest patriotism of my countrymen—and I trust them the more because an All-wise Providence moves in history and fashions the hearts of sovereigns to do His will.

DISCUSSION OF COMMISSIONER HARVEY'S PAPER.

A. J. Rickoff, of Cleveland, Ohio: I, too, have so much faith in the

people of our country as to believe that the assaults upon the common-school system will be of no avail. They come from different quarters; and it is not worth while to analyze them in order that we may detect precisely the different positions occupied by those who to-day are occasionally attacking the common-school system. It is largely a mere affectation of independence, on the part of some men, and, it may be, of the press here and there; and a safe affectation of independence it is, too,—thoroughly safe. It is thoroughly safe for any man in America to attack republican institutions. Who respects what he has to say? So strong are we in our might, in material prosperity, and in the affection of the people, that we feel that the foundations of our government can not be shaken; and we let men talk as they will in regard to the instability of democratic institutions. But when the late war broke out, and our government was threatened, then it was not entirely safe for men to oppose the institutions of our country. And so it will be with regard to the common schools. Let them but be seriously threatened, and it will be found that there is virtue enough in the people to maintain those institutions upon which the permanency of our government depends. I was about to say one word in regard to a remark which was dropped by the speaker, and that is, that the state has assumed to educate the people. Now, it strikes me that this very assumption on the part of the state to educate the people, implies something more than the education of the little children, because so soon as the state steps in and occupies the larger part of the field, it, to a good degree, prevents the establishment of private institutions for the education of the people. Thus taking the most profitable part of the work into its hands, and leaving that which is less profitable to private enterprise, the state becomes responsible for something much higher than the mere education of the children of the people. If it takes ground at all in this matter, it becomes responsible for the higher education of the people.

But it seems to me that the state should be looked upon as an association for the promotion of the prosperity of its individual members. The state is directly and indirectly interested in their prosperity, and it should, as far as possible, promote it. It is said that the educated workman will, as his work differs, produce from ten to sixty per cent more than his uneducated neighbor; and this superiority is seen in workmen that have only the bare technicalities of a common-school education. So, too, the higher education of individuals develops the resources of the state, by leading to discoveries in the different pursuits in which men are engaged, and to inventions in mechanics and all the useful arts. The combination of elementary and higher education is the only guarantee for material prosperity. As a demonstration of this, we may cite, without hesitation, the examples of Great Britain and Germany. In the development of its commerce Great Britain has forgotten its people, and its people are an ignorant people, well described by the word "masses." When Great Britain came into competition with Germany in the Paris Exposition, it was found that Germany stood head and shoulders above her in those arts by which material prosperity is developed. If we compare the states in this Union, the same lesson is learned. Where intelligence most prevails, there is material prosperity.

Again, if we consider the administration of justice, we find that just exactly in proportion to the prevalence of education, is justice secure. The demonstration of the last few years can not be denied. Compare France with Germany, and Germany again with Austria. It was not the superior numbers of the German people by which they overcame the Austrians, it was not by their superior numbers that they overcame the French, but it was by the education of the people, and that alone. To sum up the whole matter, then, whether we look to the material prosperity of the people and of the state, to the permanence of the government, to the administration of justice, or to the advance of the people, there can be but one verdict: We must educate or we must perish.

GEO. S. ORMSBY, of Xenia: I rise to emphasize, if possible, one point which may be overlooked. Why, after all, should the state undertake to educate the people? Is it because there are those in the state who are too poor to educate themselves? Is it because there are parents in almost every community who are incompetent to teach good morals, and who bring up their children in wickedness? Is it for this reason that the state should step in between them and their children and undertake to teach morals to those children and make them good children? It is said that the poor are entitled to an education, and that every child in all the land ought to receive from the state a certain amount of elementary instruction. Why should the state do this? is the question. I do not think that the state has any soul. It is purely selfish, necessarily so, and if it educates at all, it must do it for itself, and not for the person that it educates. A boy is sent to West Point, or to the Naval Academy, and is educated and supported at the expense of the state—and for what purpose? For his own benefit? By no means. It is for the benefit of the state. So if the state establishes common schools, it is because they are a necessity to the very existence of the government. If morals are to be taught in the public schools of the land, it is because the state needs moral and good men in it. If the poor are to be taught letters, it is because the state can not afford to have men poor and ignorant. Public education is based merely upon necessity, and the amount of this education, whatever it be, depends upon that very thing and nothing else; and whenever the state does not need these things, then the common schools will be swept away, and the poor will provide their own education or go without it. The common school exists because it is necessary for the existence and well being of the government. The poor man can not come up to the state and say, "You shall educate my son." The state, however, can come to him and say, "You must permit the state to educate your son."

DR. O. N. HARTSHORN, of Mt. Union College: Why should the state educate? Should it be done simply because the state is an abstract, an unconscious, an unthinking thing, without judgment or conscience, or anything beyond what simply belongs to an inanimate existence? Or is the state composed of men, of individuals whose interests compose the interests of the state? Whatever there be of intellectual, social, moral, religious, and financial interest of a single human being, however hum-

ble, that is the interest of the state. The individuals that compose the several communities form the commonwealth, and here lies just the responsibility of education, especially in a government like ours. As God has put individuals into communities, and has ordained governments, these governments are for the good of the men which compose them. It is not for me to ask this question, "Is this absolutely necessary to the state?" but, "Will the education of this individual or of the community contribute to the aggregate welfare?" This is the question? Now it may be a question, perhaps simply of expediency, whether the state of Ohio should authorize and organize a geological survey of the state. It may not be absolutely necessary that the state of Ohio should organize a geological survey of the state to determine its mineral wealth, but the question is, "Will it pay?" "Will it tend to promote the welfare of the people?" We find that it will pay, and the survey is ordered. Now on this simple ground, the interest of the community, will it pay to cultivate the human soul? Is it not true that every one should have opportunities for developing and disciplining his powers? Is this not a right that every human being, however poor and humble, or whatever be his or her condition, can demand at the hands of his brother? In this sense, are we not our brother's keeper? Here lies, it seems to me, the foundation argument upon which the state may properly educate. While we are not to forget that he who has an education, and can adapt means to ends, can indeed labor ten per cent or sixty per cent more advantageously than an ignorant person, we are not to base education upon this argument as is done in the monarchies of Europe. Take even Germany, to which very honorable reference has been made, in comparison with England and France. To a certain degree even there the education of the masses is undertaken because it promotes the military, financial, and social power of the government. In England and in France, education is more confined to the higher classes who have capital and who are employed in giving direction to the lower orders of the people who do the work; and they say that, as these lower orders are simply engaged in carrying out this work and following the line chalked out by others, it is not so essential that they should have this education. Whatever view we take of it, whether financial, or social, or intellectual and moral, it is the interest and imperative duty of the state to educate.

S. D. Barr, of Cleveland: I was exceedingly pleased with the paper which was read. It is what we ought to hear, and what more people ought to hear and hear often. Much has been said of the right and duty of the state in this matter of education, but I am disposed to believe that we have not reached the full measure of the duty of the state. For what is the state? and what is it for? It is the people—the great body of the people; and it seems to me that I would not make the distinction which was made in the paper, respecting the difference of education for men in a republican form of government and in a monarchical form of goverment or any other form. I believe that everywhere it is the duty of the state to educate men and women, because they are men and women, and as men and women, for all that is best for them. Too low a

view, in my judgment, is often taken of education, of the education which the state should seek most to promote. I am one of those who are not disposed to croak over the schools of the present day. I believe our schools are growing better—vastly better all the time; and while, perhaps, we do not learn quite as much about some few things, we are reaching out in many more ways and are awakening the susceptibilities and powers of the soul that have so long lain dormant. So far as the influence of education is concerned, and a higher and noble spirit, I believe our schools are improving wonderfully as year after year rolls away. Too high a value can not be placed upon the studies that are named in the paper, and I fully agree with all that was said on that subject in all its breadth. It is a very happy fact that the attention of the public is so fully awakened and directed to this matter. But the question is, Where does the duty of the state stop? I believe with the paper that, beyond a certain range of studies, they might be made optional, but I believe, just as certainly, that the state should provide the means fully up to and beyond this—I know not where to fix the limit. The state has the power, and it is safe to leave it with the people. As the people rise in their education and in their higher views of life and human destiny, they will constantly elevate the standard to which the state may go in its provisions for education; and I believe that no limit should be placed. I believe that we have reached that point now in education where we, as teachers, as those supervising schools and connected with educational agencies, should rise to higher views, and should dare to demand more of the state—something vastly higher in education than we have ever aimed yet at reaching—for the lifting up of the masses. I believe that the lowest part of the duty of the state is done when we have educated merely for results which show themselves in our material prosperity. That is the lowest point we should aim at. The state does not educate for any such results merely. I believe, therefore, that our high schools, wherever they are, and wherever they may be, should be maintained in all their efficiency, in all their departments, and if they send out but comparatively few graduates, I believe that these, if they are properly educated, will form centres of influence and power through the community that will well repay the state for all the money involved in their education.

J. D. Pierce, of Michigan: I have had the pleasure of having labored in the cause of education, more or less of the time, for fifty-five years. I know something of the beginning of the great educational institutions of the West and especially of the state from which I come. I know its history. I drew up its first law on the subject of education, and I beg leave here to say that in Michigan we have free schools. I labored from 1836 until 1850 to get incorporated into the laws of the state of Michigan the grand principle of free schools, from the highest to the lowest. We had free schools in part, but not wholly. At the present time every district in the state is obliged to sustain a free school, and the University is a free school. There is not a young man or a young lady who can clothe and board himself or herself, but may enter the best of our schools and

go through the highest to graduation in the University. That I have lived to see, and I have lived to see the University of Michigan outnumber any institution in the United States, for we have over twelve hundred students in it.

I am very happy, ladies and gentlemen, to meet you on this occasion. I never expect to meet again in an assembly like this. I have attended many conventions. You are all strangers to me. The time was when I knew every educational man in Michigan, and a great many in Ohio. I attended one meeting of the College of Teachers in Cincinnati, when your first superintendent was in office. I knew Mr. Lewis well, and many others in the state of Ohio, but, ladies and gentlemen, all my generation is passed away, and I alone am left. I did not expect to say one word to-day, and I have no time, of course, to discuss the great subject you have before you.

On motion of Mr. Hancock, of Cincinnati, the Association adjourned to such day as shall be fixed by the Executive Committee of the State Teachers' Association.

EDITORIAL DEPARTMENT.

—— We are much surprised to learn that the reporter of the proceedings of the joint meeting of the Ohio and Michigan Associations put the excellent remarks of Supt. Florien Giauque, of Glendale, O., into the mouth of Prof. Sill, of Detroit. The last two sentences on page 337 of the September number belong to Prof. Sill's sensible speech, but the rest of his remarks were, by some mistake, not reported. "Waverly limestone", p. 337, line 3, should be Waverly *sandstone*, and "undulating", p. 336, l. 38, should be *undulatory*.

—— We are confident that no one who reads the proceedings of the late meeting of the Ohio Superintendents' Asssociation in this number, will judge that they occupy too much of our space. The topics presented are of immediate interest to all classes of teachers, as well as to superintendents, and their consideration is earnest, pointed, and practical. We have condensed the discussions of the several papers quite one-half, but have taken great pains to give the substance of each speaker's remarks in his own words. Our next number will contain the usual variety of contributed and editorial matter.

—— The discussion of the subject of moral instruction by the Ohio Superintendents' Association, can but result in good. President Findley's paper was an able and candid discussion of this vital question, and most of the speakers who participated in its discussion, defined their position in clear and unequivocal language. Two or three of the speeches,

however, are noticeably evasive of the real issue, and quite indefinite. The weak point in the discussion was the failure of most of the speakers to recognize the scope or character of the religious instruction which is necessary to give efficiency to moral training. To give such efficiency is clearly the purpose of religious instruction in public schools. It is a means to efficient moral training, and this end should, of course, determine its nature and extent. As a means of moral training the *use* of religious motives and sanctions is far more important than direct religious instruction. What is needed is so to quicken and support the conscience that it shall be authoritative and regal. It is not enough that the child be taught what is wrong. He must fear to do the wrong. What are called natural motives are insufficient to produce this ever-controlling fear of wrong doing. They have always failed to do it, and, so long as man has a religious nature, they always will fail. Religious motives and sanctions give the conscience its authority the world over, and where they are wanting the conscience is weak and unheeded. We might as well attempt to raise a crop of corn by spreading a tent over the field to shut out the direct rays of the sun, as to attempt to train children morally by excluding that vitalizing and authoritative influence which descends from the Great Source of moral truth and life. The efficient teacher of morality must recognize God as the supreme authority in human conduct. He must teach and use man's accountability to God; man's duty to obey and love God, and God's omniscience and omnipresence. As Mr. Findley well says, it is the fear of God that can make moral instruction efficient. The child must be taught to say, when tempted, "Thou God seest me." These and other like religious truths and sanctions are as unsectarian as morality itself, and they can never be generally excluded from the public schools without destroying the system. The Christian people of this country are wise enough to protect public education from the two extreme parties that now assail it. It will neither be made sectarian nor godless.

—— THE report of President Eliot at Elmira, on a National University, has been noticed by several leading papers as an unanswerable argument against the establishment of such an institution. We have carefully read the report, and, with due respect to the distinguished President of Harvard, we are constrained to say that the argument does not strike us as impregnable, or even as remarkably strong. His criticism of the two Senate bills proves nothing, for if the features condemned are objectionable, this may be remedied by proper amendment, or by substituting a properly drawn bill. President Eliot does not show that it is impossible for Congress to frame a law that will obviate his objections. If Congress should propose to make Harvard the national university and amply endow it, we think he would consider the project eminently feasible! The argument touching the true policy of government as regards university instruction, proves, if sound, entirely too much. It forbids the establishment or endowment by the state of higher institutions, including universities or colleges, normal schools, or even high schools. It

does more than this. It undermines our entire system of public education. President Eliot asserts, for example, that the arguments that persuade us that government should direct any part of secular education apply with much greater force to the conduct by government of the religious education of the people—to an established church; and he infers that as the people may rightly be left to provide themselves religious institutions, so the government may leave them to provide suitable universities—and he might have added, in fidelity to logic, all other educational institutions. The "any part of secular education" must include elementary as well as university education. His "broad reason" why the government should not establish a national university, proves as clearly that no state should endow higher institutions. If the helping of the people to universities by the government is "a most insidious and irresistible enemy of republicanism", why is not the helping of the people to schools and libraries as dangerous a practice? If this argument against a national university had been restricted to the duty of the *national* government in education, it would have been stronger and much less objectionable. President Eliot approves of what he calls the genuine American method of public instruction, including "local taxes for universal elementary education, voted by the citizens themselves, local elective boards to spend the money raised by taxation and control the schools, and, for the higher grades of instruction, permanent endowments administered by incorporated bodies of trustees." This makes public education exclusively elementary and it ignores all state taxation and general state control, even for this purpose.

THE NATIONAL EDUCATIONAL ASSOCIATION.

We alluded last month to the eminent success of the annual meeting of this body, held in Elmira the first week of August. The arrangements made for the accommodation of the Association gave universal satisfaction, and the spirit of the meeting was excellent. President Northrop and the other officers were strongly commended for the admirable manner in which they discharged their duties.

We will add a brief report of the proceedings, condensed from a very full report in the Elmira *Advertiser*. The forenoons and evenings were occupied by the General Association and the afternoons by the Departments.

General Association.

The Association met in the Opera House, Tuesday, August 5th, at 10 A. M., President Northrop, of Connecticut, in the chair. Prayer was offered by Rev. Dr. George, of Elmira, and, after the appointment of assistant secretaries and treasurers and the usual committees, Mayor Caldwell, of Elmira, and Geo. M. Diven, Esq., President of the Board of Education, cordially welcomed the Association in brief addresses, to which President Northrop appropriately responded.

The question, "Ought the Chinese and Japanese Indemnities to be refunded unconditionally, or devoted to Specific Educational Purposes?" was introduced by Hon. Edward Shippen, of Philadelphia, who has charge of the younger Japanese students in this country. He gave a brief history of the Japanese Indemnity of $750,000 in gold, one half of which has already been paid to the United States and invested in bonds, now amounting, with the accumulated interest, to $800,000. The other half remains unpaid. The actual damage suffered by the United States in the difficulty did not exceed $19,500. He next sketched the rapid progress of Japan during the four years past, notwithstanding powerful internal opposition, and urged that, while she is struggling to meet the enormous expense of this progress, she should not be crippled by demands for the payment of the balance of the indemnity. He argued that Japan should not only be released unconditionally from its payment, but that the United States should refund the principal and interest of the indemnity now received, over and above the actual damage sustained. He stated that there were reasons to believe that if this should be done without conditions, Japan will devote all of it to the cause of public education. He paid a high tribute to the government of Japan.

He was followed by President Northrop, who commended the Japanese students in this country in high terms, Rev. Dr. McCosh, of Princeton, Prof. Atherton, of New Brunswick, Charles Hammond, of Massachusetts, Mr. Frank Hall, and Prof. W. B. Wedgwood, of Washington. Dr. McCosh suggested that if our government refunds the indemnity, care should be taken that it do not fall into the hands of the reactionary party. Mr. Hall and Prof. Atherton stated that the reactionary party is the one now in power there.

At the evening session, Rev. Dr. McCosh, of New Jersey, read a very able and suggestive paper on "Upper Schools", the grade of schools between the elementary schools and the colleges. He believed that the elementary schools of the United States rank as high as those of any country in the world, but we are in danger of being surpassed by other nations owing to our want of an organized efficient system of school supervision. He described the Irish system of school inspection, the best known to him. He also expressed the opinion that American colleges impart as high and certainly as useful an education to the great body of students as European colleges, including the great European universities, "in all of which there are full as many idle boys, and full as many graduate with a miserably imperfect knowledge, as in the American colleges." The superiority of the higher colleges of Europe is found in the fact that they produce a select few, at the most not more than one-tenth of the whole, who have attained a riper scholarship or have reached a higher culture, or who leave college with a more fixed determination to do original work. "The grand question for American colleges to consider at present is, How may we keep the excellences we have, and add to them this special culture of the highest European universities?" He did not think this end, *the training of a few higher minds*,

can be reached by elevating the standard of admission now adopted in our best colleges. The great majority of students do not now enter college too young. Healthy youths should be prepared for college by sixteen or seventeen. He suggested that the say ten per cent of students who show themselves fitted to be superior scholars, should be encouraged by fellowships, earned by competition, to go on to higher, special studies. With such a system he believed that American colleges will produce a select body of scholars fit to match the first wranglers of Cambridge, the double first of Oxford, or the doctors of philosophy and of science of the scientific schools of Europe. The great defect of our American system of education is the want of a sufficient number of upper or secondary schools, between the elementary schools and the colleges, to enable abler youths to pass from the former to the latter. He sketched the systems of secondary schools in Germany and Great Britain, and showed how defective and inadequate is secondary instruction in the United States. The remedy proposed was first the estalishing of preparatory schools by private endowments, and, secondly, by state and city endowments. The man who endows a first-class academy deserves more credit than he who founds "a weakling college." He urged that the ninety millions' worth of unappropriated land belonging to the general government, should be devoted to the encouragement of secondary schools in the eastern, middle, and western states, and in the southern states one-half of it should be devoted to secondary schools and the other half to aid and encourage the establishment of common schools. He urged that no more of this land should be given to the so-called agricultural colleges or to schools of science and technology, at least until a special inquiry has been made into the actual work now done by these institutions. He stated that in no country in the world has agriculture been much benefited by mere agricultural schools. In all Germany there are but six agricultural schools, and some of these are "very feeble institutions." Cornell University, with its $900,000 endowment from the agricultural land grant, graduated only *two* agricultural students in June last. He also maintained that no part of this ninety millions should be given to colleges. The address produced a deep impression on the large audience present.

Prof. Edward S. Joynes, of Washington and Lee University, Va., made a spirited reply to Dr. McCosh's reference to the condition of education in the Southern States. He said that Virginia was doing nobly for the elementary instruction of her children, both white and black, and added, "Let the north be patriotic and generous to their southern brethren; let there be equal treatment." Dr. McCosh replied as spiritedly, that he meant that the South should be assisted in her heroic efforts to elevate all her people. This little episode created quite an excitement and much enlivened the proceedings. Prof. Roche, of Baltimore, added a few remarks.

The session of Wednesday morning was devoted to a discussion of Dr. McCosh's paper on "Upper Schools." Speeches were made by Dr. Eli T. Tappan, of Kenyon College, Ohio, Hon. J. P. Wickersham, of Penn-

sylvania, Dr. Daniel Reid, of the University of Missouri, Dr. Charles Hammond, of Massachusetts, Dr. J. H. Raymond, of Vassar College, N. Y., Dr. Joseph White, of Massachusetts, President Eliot, of Harvard, Supt. W. T. Harris, of St. Louis, Mo., Mr. Ross, of Seneca, Dr. G. P. Hays, of Washington and Jefferson College, Pa., Prof. E. D. Blakesley, of the Pottsdam Normal School, N. Y., Mr. Root, of Missouri, Prof. Atherton, of New Brunswick, N. J., and Dr. McCosh.

President Tappan, of Ohio, stated that the high schools of that state do not prepare one-tenth of the students who enter Ohio colleges. They are doing different work. He urged the multiplication of preparatory schools.

Supt. Wickersham, of Pennsylvania, urged that the number of public high schools should be increased, and that the attention of boys should be directed to a higher education, and not so generally to business. There should be a heartier sympathy between the colleges and the common schools.

Dr. Reid, of Missouri, spoke in favor of every land grant made by Congress for industrial education; great advantages had been derived from them in Missouri.

Dr. Hammond, of Massachusetts, urged the importance of preparatory schools in addition to the public high schools.

President Raymond, of New York, spoke strongly in favor of schools preparatory to college. There is nothing to take the place of the academies which are "dying out." The high schools should meet the emergency.

Dr. White, of Massachusetts, said we must carry on the high schools by force and the academies by love. The poor boy must have an opportunity of securing as good an education as his rich neighbor. The agricultural college gives a liberal education, and we want intelligent farmers and mechanics.

President Eliot, of Harvard, believed it to be a positive evil to have such incomplete statistics as those used by Dr. McCosh; they mislead. Massachusetts's high schools do not fill her colleges. Harvard does not receive over ten or fifteen per cent of her students from the high schools of Massachusetts, or over thirty or thirty-five per cent from that source in the country generally, but they come principally from private schools. Massachusetts is endowing private academies which are preparatory to college. Denominational schools are a difficulty. The interference of the national government in the educational interests weakens them. He deprecated asking the government for aid in any good work which we ought to attend to ourselves. It was pernicious and demoralizing.

Supt. Harris, of St. Louis, reviewed the supervision of schools in this country and spoke in favorable terms of the high schools. They now afford an education really better than was obtained in our colleges at the beginning of this century. He thought the university should change.

President Hays, of Pennsylvania, advocated the establishing of strong preparatory schools instead of weakling colleges, and hoped a committee

would be appointed to report at the next meeting what changes in the high schools are necessary to meet the requirements.

Prof. Blakesley, of New York, spoke of the evil of underrating education. He condemned commercial colleges in unmeasured terms as completely demoralizing to the boys in the land. What was needed was a liberal education, and boys should be directed to seek the highest and best education obtainable.

Prof. Atherton, of New Jersey, spoke in favor of agricultural colleges, and especially of the last land grant.

Dr. McCosh closed the discussion. He disclaimed any intention to cast aspersion upon any locality. What he proposed was to aid the common schools where needed. He advocated colleges for females as well as males. He took the best statistics that could be got, but they were not claimed to be perfect. According to the last report, 4,171 pupils in high schools and 4,000 in academies in New England were preparing for college. He did not think the religious schools would effect any harm; let them all go on together. He proposed to give this last $90,000,000 conditionally; that the districts shall give an equal amount. He had no very high opinion of agricultural schools.

The session closed after the transaction of business, including the appointment of Dr. Reid, of Missouri, Prof. Joynes, of Virginia, and Dr. Creery, of Maryland, a committee to report resolution on the death of Dr. Wm. H. McGuffey.

At the evening session an able paper by Richard Edwards, President of the Illinois Normal University, on "How Much Culture should be imparted in Our Free Schools?" was read by I. N. Carlton, of Connecticut. It advocated the highest culture practicable. It was discussed by Supt. Wickersham, of Pennsylvania, who believed that our high schools would grow into higher schools, and finally end in the college or university. He could put no lower limit to public education. Prof. W. P. Atkinson favored the system of free schools, but not a compulsory education beyond the elementary branches.

A paper on "The Relation of the General Government to Education" was read by Prof. G. W. Atherton, of Rutger's College, N. J. It was a paper of great practical interest, and received much attention. The conclusion reached was that the nation must educate, and practical ways were pointed out in which this can be done. It was advocated that the proceeds of the sales of public lands should be devoted to the purposes of education.

Dr. George P. Hays, of Pennsylvania, D. B. Hagar, of Massachusetts, E. S. Joynes, of Virginia, Newton Bateman, of Illinois, and R. G. Williams, of Vermont, were appointed a committee to report on the changes needed in high schools to make them preparatory to the colleges.

The session of Thursday morning opened with miscellaneous businsss.

M. A. Newell, President of the State Board of Education of Maryland, described and ably defended the school system of that state, and he was sustained by Rev. Dr. Van Bokkelen.

Supt. John Hancock, of Ohio, advocated the propriety and importance

of state and national action in support of schools. He believed that it was proper for the government to establish a great national university. He offered the following resolution, which, after reference to the committee on resolutions, was unanimously passed:

Resolved, That, in the opinion of this Association, the proceeds of the sales of the public lands should hereafter be set apart by Congress under such conditions as it may deem wise, as a perpetual fund for the support of public education in the states and territories.

The resolution was strongly advocated by Prof. Atkinson, of Boston.

Addresses on "Education in the South" were delivered by Hon. W. G. Brown, State Superintendent of Louisiana, and Hon. J. C. Gibbs, State Superintendent of Florida, and a lively discussion took place between Prof. Atherton, M. A. Newell, and Dr. McCosh on the paper read the evening previous by Prof. Atherton. President Fairchild, of Kentucky, and Prof. Joynes, of Virginia, spoke of the school privileges in the South.

Ex-Gov. Horatio Seymour, being in the Hall, was called upon and introduced by President Northrop. He was received with applause, and spoke briefly and to the delight of the audience on the general subject of teaching and education.

The evening session was also devoted to business and brief addresses. Among the resolutions reported by the committee, and unanimously adopted by the Association, was one discharging all permanent committees who have neither met within the past year nor reported to the Association at the present meeting. This discharges the committee on a national university.

Dr. Hammond, of the special committee on the Japanese Indemnity, reported a resolution, which was adopted, recommending the unconditional relinquishment of the fund to Japan, and a committee, consisting of the officers of the Association and one member from each state, was appointed to memorialize Congress on the subject.

Dr. Daniel Reid, chairman of the committee, reported appropriate resolutions in regard to the late Dr. McGuffey, which were adopted.

Brief and stirring addresses were made by President Northrop, Prof. J. M. Langston, of Howard University, D. C., Hon. Joseph White, of Massachusetts, Rev. Thomas K. Beecher, of Elmira, Prof. Edward S. Joynes, of Virginia, Supt. J. H. Binford, of Richmond, Va., Supt. McIver, of North Carolina, Prof. Rounds, of Maine, Supt. Jillson, of South Carolina, and Supt. W. G. Brown, of Louisiana.

President Northrop made the announcement that the enrollment at this meeting of the Association had been far greater than that at Boston last year, or at St. Louis the year before, and the Association adjourned *sine die*.

The officers elected for the coming year are as follows: President, S. H. White, Illinois; Secretary, A. P. Marble, Massachusetts; Treasurer, John Hancock, Ohio; Vice-Presidents, Dr. James McCosh, N. J., Dr. G. P. Hays, Penn., J. W. Dickinson, Mass., James H. Binford, Va., Miss D. A. Lathrop, Ohio, Mrs. M. A. Stone, Conn., W. J. Phelps, Minn., Dr. Daniel Reid, Mo., E. J. Fairchild, Ky., W. R. Creery, Md., John Swett,

Cal., N. A. Calkins, N. Y.; and thirty-two Counselors—one for each state represented.

ELEMENTARY DEPARTMENT.

This department, N. A. Calkins, of New York, President, met in the Opera House, on Tuesday, Wednesday, and Thursday afternoons. The entire session of Tuesday was devoted to a discussion of the subject of Elementary Reading. It was introduced by an elaborate paper on "The Thought and Sentence Method," by George L. Farnham, of Binghamton, N. Y. This was followed by a paper on "The Phonetic Method, with Pronouncing Orthography," by Edwin Leigh, of New York. The subject was further discussed by Dr. Adolf Douai, of New Jersey, W. N. Barringer, of Newark, N. J., Mrs. A. J. Rickoff, of Cleveland, who spoke with great acceptance, Charles O. Hurlbut, of Paterson, N. J., E. A. Sheldon, of Oswego, N. Y., Mr. Ross, of Seneca, N. Y., Prof. Goodwin Clark, of Boston, Mr. Freeborn, of Wellsville, N. Y., and Mr. Abbott, of Brooklyn, N. Y. This was probably the most thorough discussion of the subject that has yet taken place in any educational meeting in this country, and we advise all who are interested in primary teaching, to purchase a copy of the proceedings when published.

The second session opened with an interesting paper by Dr. Malcolm McVicker, of Potsdam, N. Y., on "Principles and Methods of Teaching Arithmetic." He alleged that every principle and process should be presented objectively, and fully illustrated his method of eye teaching. His views were sustained by J. H. Hoose, of Cortland, N. Y., and G. L. Farnham, of Binghamton, N. Y.

An eloquent and effective paper was next read by Henry F. Harrington, of New Bedford, Mass., on "What should be the Leading Object of American Free Schools?" His answer was that the great purpose of popular education is "to bring to the highest possible state of efficiency that sum total of all the powers of the pupil's being, purely and nobly interacting and inter-dependent, which is termed *manhood*." Only the complete and perfect man can be relied on to make the upright, trustworthy and orderly citizen. This thought was fully elaborated.

At the Friday's session, Prof. J. W. Dickinson, of Westfield, Mass., on behalf of a committee appointed last year, submitted a report upon the Kindergarten, which elicited considerable discussion, participated in by Mr. Barringer, of New Jersey, Mr. Richards, of Washington, and others. Miss Amy L. Bradford, of North Carolina, proposed to try the Kindergarten in her school.

Mrs. Krause, of Washington, D. C., read a valuable paper on "What Froebel's System of Kindergarten Education is, and how it can be introduced into the Public Schools." The paper elicited an interesting discussion, participated in by both ladies and gentlemen. Miss Payson, of Chicago, and Miss Kate French, of New Jersey, approved of the views of the paper. Prof. Z. Richards, of Washington, presented his views on the subject of schoolhouses and recreation.

Resolutions were adopted recognizing the Kindergarten as a potent means for the elevation of primary education; recommending the es-

tablishment of Kindergartens, public and private, and also of a normal school for the special purpose of training Kindergarten teachers; and calling attention to the importance of initiatory experiments to determine the best methods of connecting the Kindergarten with our present school system.

A brief and practical paper was next read by Supt. A. J. Rickoff, of Cleveland, O., on "School Hours for Children under Ten." He would not keep children at first in school more than three hours a day, and until nine years of age not more than four hours a day, and above nine years of age not more than five hours a day.

The session closed with an excellent paper by Prof. A. Eiswal, of Savannah, Ga., on "The Education of the Emotional Nature."

The officers elected for the ensuing year are as follows; President, Henry F. Harrington, New Bedford, Mass.; Vice-President, Miss Hannah Cummings, Kirksville, Mo.; Secretary, George B. Sears, Newark, N. J.

Normal Department.

This Department, A. G. Boyden, of Bridgewater, Mass., President, met each afternoon at Stancliff Hall. Tuesday's session was devoted to the consideration of a paper by Dr. Richard Edwards, of Illinois, on "Duties and Dangers of Normal Schools", which was read by Prof. D. B. Hagar, of Salem, Mass. The paper elicited an interesting discussion, participated in by R. G. Williams, of Vermont; J. H. Hoose, of New York; C. C. Rounds, of Maine; Oliver Airey, of Wisconsin; Geo. P. Beard, of Pennsylvania; I. N. Carlton, of Connecticut; M. A. Newell, of Maryland; C. H. Verrill, of Pennsylvania, and others.

The second session was opened with a discussion of the question, "What should the Normal Schools aim to accomplish in the Teaching of Natural Science?" Mr. Dwight, of New Britain, Ct., J. C. Greenough, of Rhode Island, and Mr. Winters, spoke on the subject.

This was followed by the reading of a very logical and thoughtful paper on "Elementary and Scientific Knowledge", by Prof. J. W. Dickinson, Westfield, Mass.

Miss Delia A. Lathrop, of Cincinnati, read a paper on "Training Schools", in which the subject of normal training was discussed under the heads of normal schools, teachers' institutes, and training schools. This was one of the ablest and most valuable papers read at Elmira. It elicited an earnest discussion, participated in by Mr. Brown, of Maine; E. C. Hewitt, of Illinois; John Hancock, of Ohio; D. B. Hagar, of Massachusetts; H. B. Buckham, of Buffalo. N. Y.; Zalmon Richards, of Washington; E. A. Sheldon, of Oswego, N. Y., and E. T. Tappan, of Ohio. Miss Lathrop congratulated the speakers on the fact that they had not sacrificed truth to gallantry in discussing her paper.

The closing session well sustained the interest manifested from the first. Prof. C. C. Rounds, of Maine, introduced a resolution affirming it to be the sense of the Department that all normal schools should have practice schools. It was passed after a discussion in which Prof. C. H. Verrill, of Pennsylvania, Dr. McVicker, of New York, and others, took part.

Prof. Henry B. Buckham, of Buffalo, N. Y., read a thoughtful and valuable paper on "The Relation of Scholarship and Method in Normal Schools." He took the position that scholarship should not be subordinated to method in normal instruction; neglect method rather than scholarship. It gave rise to a spirited discussion, in which Prof. Carlton, of Connecticut, and Dr. McVicker, of New York, toook a prominent part.

The officers elected for the ensuing year are as follows: President, J. H. Hoose, Cortland, N. Y.; Vice-President, W. N. Hailman, of Louisville, Ky.; Secretary, Miss Roolison, of Cincinnati.

DEPARTMENT OF HIGHER INSTRUCTION.

This Department met Tuesday afternoon in the City Hall, Dr. Daniel Reid, of Missouri, President *pro tem.* President Charles W. Eliot, of Harvard College, presented a report on a National University. He gave a somewhat facetious account of what the National Educational Association has done about a National University since 1869, reaching the conclusion that the permanent committee appointed at St. Louis has never had a moment's existence, and that the Association is "thus far free from all responsibility for whatever may have been done since August, 1871, about a national university." He next examined the two bills on the subject which were introduced into the Senate in 1872, and then proceeded to discuss the true policy of our government as regards university instruction. He denied that it is the duty of government to provide and control educational institutions, affirming that this conception of government is abolescent everywhere. Our government is not the guardian of the nation's morals. It is no more the duty of government to direct secular education than to conduct religious education. As religion is properly left to voluntary support, so may the people be left to provide suitable universities for the education of their youth. The very essence of republicanism is self-reliance, and hence the government should perform no function which any private agency can perform as well. The subsidizing process saps the foundations of public liberty. Let us cling fast to the genuine American method of public instruction —the American voluntary system in which the higher grades of instruction are provided by permanent endowments administered by incorporated bodies of trustees.

Mr. Wedgwood, of Washington, followed with a paper in favor of a university. Dr. McCosh, of New Jersey, opposed a national university, but he believed the government should look after schools and morals. He alluded to the fact that Harvard had repeatedly received aid of Massachusetts. Dr. Reid, of Missouri, gave a history of the establishment of state universities by grants of public lands, and added that he believed in a national university. He did not fear such appointments as those of Bache, Henry, and Pierce. Messrs. Sprague, of Washington, Hancock, of Ohio, Harris, of St. Louis, and Atherton, of New Jersey, spoke in favor of a national university, and Messrs. Atkinson, of Iowa, Joynes, of Virginia, Vail, of Rochester, and Root, of Missouri, against. No action on the subject was taken by the Department.

The second session was held in the chapel of the First Presbyterian Church. A suggestive and scholarly paper on "The Study of the Classics", was read by Prof. Edward S. Joynes, of the Washington and Lee University, Va. It took a strong position in favor of the study of the ancient languages, pronouncing it the noblest element in modern culture.

The paper was discussed by President Eliot, of Harvard, who stated that linguistic study in early life is necessary to the after study of the sciences, Prof. John R. Roche, of Maryland, Prof. Meres, of Hamilton College, Rev. F. G. Surbridge, and Prof. E. G. Youmans, of the *Popular Science Monthly*. Prof. Youmans stated that Count Rumford and Prof. Faraday absolutely ignored a classical education, and that Prof. Tyndall has no knowledge of Latin and Greek. President Eliot replied that these distinguished scientists were exceptional representatives of remarkable genius. Lincoln was not liberally educated, but his Gettysburg speech is unsurpassed, and perhaps unsurpassable. The average boy is not thus educated. Prof. Atkinson thought that this speech by Lincoln pointed a lesson. He believed that Latin grammar had made many a man a dunce who, without it, might have been a genius.

The closing session was devoted to a paper by Prof. W. P. Atkinson, of Boston, entitled "A Liberal Educâtion for the Nineteenth Century." The main drift of the paper, which was full of well turned hits, was against the study of the classics to the extent that has been demanded. It provoked a very spirited discussion which was participated in by Dr. Reid, of Missouri, Dr. Hammond, of Massachusetts, Prof. Meres, and President Brown, of Hamilton College, N. Y., Prof. Bennett, of Syracuse, University, N. Y., Prof. Joynes, of Virginia, President Hays, of Pennsylvania, and President Tappan, of Ohio.

The officers elected for the ensuing year are as follows: President, Daniel Reid, of Missouri; Vice-President, W. P. Atkinson, of Boston; Secretary, Geo. P. Hays, of Pennsylvania.

Department of Superintendence.

This Department, Supt. W. T. Harris, of St. Louis, President, met on Tuesday and Thursday afternoons in the Joy Lodge Rooms. At the first session, Supt. A. J. Rickoff, of Cleveland, read a paper on "Schoolhouse Plans", illustrating the same with drawings upon the blackboard. Special attention was given to ventilation and light.

Supt. J. H. Binford, of Richmond, Va., read a suggestive paper on "The Relation of School Boards to Superintendents." The subject was discussed by Supt. Packard, of Saratoga, Supt. Hancock, of Cincinnati, Supt. A. Armstrong, of Iowa, Supt. Wickersham, of Pennsylvania, Supt. Rickoff, of Cleveland, Supt. Creery, of Baltimore, Supt. Marble, of Worcester, Mass., and Supt. Sawyer, of Connecticut.

At the second session, a paper by Chancellor Eliot, of Washington University, St. Louis, on "Western University Education", was read by President Harris.

A paper on "Leigh's Method of Teaching Reading", by Supt. Wm. M. Bryant, of Burlington, Iowa, was read by J. H. Binford, of Richmond.

It was an able defense of Dr. Leigh's method. The subject was further discussed by Prof. Hurlbut, of New Jersey, J. W. Bulkley, of Brooklyn, Supt. Harris, of St. Louis, Supt. Farnham, of Binghamton, N. Y., Supt. Shortridge, of Indianapolis, Ind., Supt. Wilson, of Washington City, and Dr. Leigh, nearly all of whom commended the method.

Supt. Rickoff, of Cleveland, chairman of the committee, submitted a report recommending that a meeting of the Department he held in Washington City some time next winter. The report was adopted, and the officers of the Department were constituted a committee to call the meeting.

Supt. J. H. Binford, of Richmond, Va., was elected President for the ensuing year, and Supt. A. Armstrong, of Iowa, Secretary.

On Friday the members of the Association, with invited guests, made an excursion to Watkins's Glen.

EDUCATIONAL INTELLIGENCE.

—— It is not necessary to secure a postal order or to register a letter when remitting us a single subscription. So small a sum may always be remitted in currency.

—— Subscriptions for this journal may begin with the July or October number, but *not* with the September number. To secure the September number, subscribers must begin with the July number. We can supply back numbers from July and a few sets from January last.

—— The Ohio Agricultural and Mechanical College has opened with some thirty students, and the faculty is inaugurating a thorough course of scientific instruction. The "Agricultural Course", first announced, has been given up, and agriculture takes its place as a department.

—— Boston, Mass., came out of the Vienna Exposition covered with honor, having received the "Grand Diploma of Honor" for the superiority of her schools. Brewer & Tileston, of Boston, were awarded the "Medal of Merit", in consideration of their publication of Worcester's Dictionaries.

—— The *Illinois Schoolmaster* advocates the abolishment of the office of county school superintendent in Illinois, claiming that in its present crippled condition, due to legislation in 1872, it will retard the progress of the free-school system of the state. Women are permitted to hold any school office, and in many counties ladies are candidates for the office of superintendent. The *Schoolmaster* advocates their election, when competent to do the work of the office.

—— W. Brinkerhoof has leased the property of the Hopedale (O.) Normal School for a term of years, and has assumed the sole control and responsibility of the educational department. The courses of study include a Scientific Course and a Classical Course, each four years. Nothing is

said of a normal course in the circular sent us. The faculty consists of six teachers.——The Ohio Central Normal School has opened with nearly twice as many students as entered at the opening last year, and the prospects for the year are very encouraging. Mr. Lewis has made a promising beginning, as we anticipated.

——The American Institute of Instruction held a successful meeting in Concord, N. H., the third week of July. Rev. Dr. A. D. Mayo, of Springfield, Mass., formerly of Cincinnati, gave an excellent address on "Our Common Schools the National Instructors in Public Virtue." He was warmly applauded. Prof. M. E. Stebbins, of Springfield, was re-elected president, which insures the success of the next meeting.

——Dr. J. B. Reynolds, of Louisville, Ky., conducted county institutes in Graves, Galloway, Marshall, Ohio, Hancock, and Wester counties, Ky., in his vacation, with fine success. The Congressional District Institutes worked well in '71 and '72, but they have given place to county institutes. The leading teachers of the state are taking hold of the work quite energetically, and it is probable that next year an institute will be held in nearly every county. The meeting of the State Teachers' Association at Winchester was earnest and representative, but the attendance was not large. We hope to give a fuller notice next month.

——Wm. M. Bryant, for several years past superintendent of the schools of Burlington, Iowa, has accepted the principalship of one of the district schools of St. Louis. He did an excellent work at Burlington. ——Charles Krimmel has resigned his position in the public schools of Columbus, O., and Col. Frambes, the other assistant superintendent, assumes his duties, for the present, with an increase of $300 in his salary.——A. S. McPherson, late principal of the Sixth Ward Grammar School of Akron, O., has taken charge of the preparatory department of Tabor College, Tabor, Ia.——Edwin Regal has severed his long connection with the Hopedale Normal School to go into the book business at Oberlin, O. He has purchased the College Bookstore.——T. C. H. Vance, for several years past at Georgetown, O., has taken charge of the new Kentucky Normal School, at Carlisle, Ky. The institution has five departments and eight teachers, and it is the principal's intention to make it a permanent, purely professional school.

BOOK NOTICES.

The American Educational Readers. A New Graded Series. Arranged and Graded for the Use of Schools. New York and Chicago: Ivison, Blakeman, Taylor & Co. 1873. .

We have examined the first four numbers of this new series of Readers with great pleasure and satisfaction. A more beautiful series of elementary school books has not been published in this country, the entire mechanical execution, including typography, illustrations, and binding, being of the highest excellence. It will certainly not be the fault of school-book publishers if the eyes of the present generation of children

are injured by study. Nearly all of the more recent elementary text-books are printed from large and clear type, and the skill of the very best artists is employed to make their pages beautiful and attractive. The American Educational Readers are a fine illustration of this marked improvement in modern school-books. The lessons are also excellent both in matter and style, and their careful gradation makes the title, "Graded Series", specially appropriate. We pity the teacher who can use these readers and not have interested classes. It may be a question whether the lower books contain enough reading matter, but we can not have large type and thin, cheap books and, at the same time, have a large amount of matter. These readers contain, we judge, about an average amount of reading matter.

A MANUAL OF MORAL PHILOSOPHY. Designed for Colleges and High Schools. By ANDREW P. PEABODY, D.D., LL.D., Plummer Professor of Christian Morals in Harvard University. New York and Chicago: A. S. Barnes & Co.

This is a work of rare vigor and ability. Dr. Peabody's style is very clear and concise, and there is often an axiomatic terseness seldom found in works of this class. For example, on page 106, we find the following: "A man must be self-governed or under a worse government than his own." The general tone and spirit of the work must be quickening and inspiring to the young student, and he can not carefully follow the author without being greatly benefited and strengthened in all the best impulses of his moral nature. Many of our metaphysicians may doubt the force of the reasoning in regard to the liberty of the will as opposed to the views of Edwards and those of his school, but these questions are only incidental, and do not affect the body of the work. We regard the work as one of the most valuable and worthy contributions to higher educational literature that we have seen for many years.

FOURTEEN WEEKS IN PHYSIOLOGY. By J. DORMAN STEELE. New York and Chicago: A. S. Barnes & Co.

Mr. Steele has prepared an excellent work for beginners in physiology. It is concise and simple in statement, and yet not dry and uninteresting. It gives all the more important facts connected with the nature and functions of the bodily organs. The illustrations are admirably given. The work, carefully studied, will give our school boys and girls all the knowledge in this department they need, unless they wish to make physiology a special study. Many valuable hints in hygiene are given, and all quackery and superstitious nonsense are properly and energetically condemned. The notes, in fine print at the bottom of each page, are brief and pointed extracts from many of the best authorities, and illustrate, in a most interesting manner, the text. The publishers have brought out the work in fine style of printing and illustration.

AMERICAN JOURNAL OF EDUCATION. Edited and published by Henry Barnard, LL.D., Hartford, Conn. Price, $1.25 a Number, or $4.00 a Volume.

We have received the March and June numbers of the current volume of this valuable educational quarterly. The March number is devoted

to superior instruction, pedagogy, biography, history of American education, and school architecture, with a classified index of volumes I. to XVI. The June number treats of "Public Instruction in Finland", and the "State Systems of Common Schools in the United States", with several other important chapters. Dr. Barnard announces that this volume (1873) will close the National Series, but he hopes to issue an International Series. This volume is the twenty-fourth of the entire series of the *American Journal of Education.*

THOMPSON'S DRAWING TEACHER is a new eight-page monthly journal, devoted to drawing, penmanship, and primary instruction in reading and arithmetic. The chief feature is a series of drawing lessons so arranged and graded as to present a systematic course of instruction. These lessons, with those in the other branches named, are also published in a more compact form, with the title of "Thompson's Monthly Leaves", for the use of pupils in the public schools. Both journals are edited and published by L. S. Thompson, Sandusky, Ohio. The price of the "Teacher" is $1.25 a year; of the "Leaves," 50 cents.

NEW BOOKS RECEIVED.

THE FAIR GOD; or The Last of the 'Tzins. A Tale of the Conquest of Mexico. By Lew. Wallace. Boston: James R. Osgood & Co. Price $2 00.

HISTORY OF ENGLAND. By Edith Thompson. Edited by Edward A. Freeman, D. C. L. New York: Henry Holt & Co. Price $1 00.

OXFORD'S SENIOR SPEAKER. A Collection of Exercises in Declamation, Recitation, and Representation for Advanced Classes. By William Oxford. Philadelphia: J. H. Butler & Co.

EDUCATION ABROAD AND OTHER PAPERS. By Birdsey Grant Northrop, LL.D., Secretary Conn. Board of Education. New York and Chicago: A. S. Barnes & Co.

SCHOOL REPORTS.

Annual Report of the School Committee of Providence, R. I. Rev. Daniel Leach, Supt.

Eighteenth Annual Report of the Public Schools of Brooklyn, N. Y. J. W. Bulkley, Supt.

Thirty-sixth Annual Report of the Board of Education of Cleveland, O. 1872. A. J. Rickoff, Supt.

Annual Report of the Public Schools of Vincennes, Ind. T. J. Charlton, Supt.

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EDUCATIONAL NOTES.

No. V.—System in Primary Instruction.

Should teaching be systematic? This is a practical question with teachers, and one which is not entirely one-sided. Educational works earnestly enjoin system in instruction; and lecturers grow enthusiastic as advocates of a "logical order." That systematic instruction is a thing of great excellence, can not be denied; that "logical order" is sometimes a great nuisance, I can not help thinking. I have seen what might have been excellent teaching, spoiled in the effort to adhere to a prescribed system. I have known mental growth to be retarded by the endeavor to run the minds of pupils into the mould of a teacher's order of preparation. From my own observation and experience, I have been led to hold dual views on this question of system in teaching. I am in favor of systematic teaching; I am opposed to systematic teaching. Permit me to explain what I mean under two propositions, one of which will be discussed in the present article.

I. Primary Instruction need not be Systematic.

A rigid adherence to system in teaching young children is not only not useful, but, I am persuaded, is often positively pernicious. This proposition, though contrary to the usual precept, seems susceptible of proof. Childhood is the period for objects and ideas. An infant awakens into conscious being

through its senses. A little child lives in the activity of its perceptive powers; it wants to see, and feel, and handle the things around it. Its eye delights in color and form; its ear listens for sounds of bird and bee, or the human voice, and its fingers itch to touch, to handle, to tear and break.

In this demand for facts, it cares not how disconnected they are; the more so, perhaps, the better. It has no interest in their relations to each other; it adds no attraction to see them in orderly arrangement. Indeed, to systematize them would often detract from its interest in them; it rather delights in confusion and disorder. It prefers Nature as she presents herself in the unsystematized variety of forest, meadow, and field. Arrange the playthings of children, and how long they will remain so, mothers can tell us out of an experience of annoyance and worry. There seems to be an attraction in disorder, rather than in system, to a little child; an interest in irregularity and confusion.

The facts of the experience of child-life have a psychological basis. The first process in mental development is the acquisition of ideas. The young mind perceives before it compares. From the perception of objects, it rises to the comparison of objects. Out of comparison arises the idea of relation, and from relations of likeness or unlikeness, come the classification and systematic arrangement of objects and ideas. In obedience to this law of its mental nature, the little child is a fact-seeker; it forms notions before it unites them into propositions. It is hungry for things; it cares nothing for their relations. It says, "Give me a knowledge of objects; I will investigate them and compare them by and by. Fill my memory now with the materials of thought, and I will work them up into truths and system, and see the logical order of things in the good time coming." The world is new to it; every object adds to its intrinsic interest the interest of novelty. The child seems hungry for knowledge. Its mental appetite is like that of the cow; it swallows hastily now, but it will "chew the cud" of thought afterward, and prepare the mental food for digestion and assimilation.

These facts of child-life, and the mental laws on which they are founded, have an educational significance. The spontaneous activity of childhood indicates the principles which should guide us in its education. There is no principle of teaching more important than that we should conform our precepts and

methods to the indications of nature. The lawgiver of the educational code should sit at the feet of childhood, and learn wisdom. "Except ye become as little children, ye can not enter into the kingdom" of truth with respect to the great work of primary education.

It is thus seen that the facts of nature and the laws of mind both indicate that system in primary education is not essential; indeed, that it is a waste of time and patience. It is of no benefit to the child, for it can not appreciate the system, even if it could understand it; and it is apt to be disgusted with it. In instruction, the teacher should follow, as far as possible, the spontaneous activity of the mind of the child. Do not try to run each intellectual activity in the rut of your own plan. I have seen object lessons completely shorn of their power for culture by forcing the mind of the pupil to flow in the channel of the teacher's prepared outline. An object lesson can not be reduced to a fixed form; it is a spontaneity, a new creation each time it is given. It can not be put in a fixed form of words. A lecture or a discussion may be reproduced in the very same order and language; an object lesson, properly given, can never be repeated.

Still another fact is not without bearing upon this question. The appreciation of orderly arrangement and systematic classification is one of the latest things even in the child's *thought-life.* It early inquires for causes. "What's the reason?" is lisped on the mother's knee; but parents are not often annoyed with the question, "What's the relation or logical arrangement?" In the history of science, the classificatory stage of knowledge is not among the earliest. Man inquired for the causes of facts long before he attempted to reduce them to a system. The classificatory sciences were among the latest to be developed: natural philosophy and astronomy were before botany and zoölogy. In view of this historic fact, and the identity of the law of development of the individual and the general mind, it is believed that much effort in the classification of knowledge should be postponed until the pupil is somewhat advanced in study.

It should be remembered also, that the child is influenced in its early culture by its artistic sense. Emerson speaks with great significance, when he says, "Beauty is the pilot of the young soul." The child looks at nature much more like the artist than the philosopher. The philosopher sees the har-

mony and order of the material world, and searches for the law that binds it together in unity; the artist sees the manifold forms in which Nature has manifested herself, and enjoys the beauty of her endless variety. Had Nature arranged the trees and flowers of forest and field in genera and species, it might satisfy the systematic taste of the scientist, but what would an artist say to a landscape whose parts were arranged in "logical order"?

This tendency of the young mind is authenticated by the facts of history. The race had its childhood as well as the individual, and the development of each individual mind is but a type of the development of the race. The race was artistic before it was philosophic. In the history of mankind, Art preceded Science. Even the useful arts were, in their infancy, the parents of Science. These principles should not be forgotten in primary education. Let us not take the interest out of our instruction by being too formal and systematic. Treat the child as a spiritual activity, having native tastes which are not to be disregarded in its education. The philosopher may worship the beauty of order and law; but the child, like the artist, would build altars to the Beautiful Disorder.

In this discussion, it is not to be understood that the teachers should not have a certain general order, in which knowledge is to be presented to the mind of the young pupil. There should be order in the topics, but not too much system in their treatment. To-day the pupil is ready for one thing, to-morrow he can understand something more difficult, and there should be a gradation in the subjects to suit this growing capacity. It is meant that the actual instruction shall not be forced into some particular set form, but that the child shall be allowed to follow, to a certain extent, the order suggested by its own free and spontaneous nature.

State Normal School, Millersville, Pa. EDWARD BROOKS.

SCHOOL HOURS FOR CHILDREN UNDER TEN.

[A paper read before the Superintendents' Department of the National Educational Association by ANDREW J. RICKOFF, Supt. Schools, Cleveland, Ohio.]

It is injudicious to prescribe for all the children in a place or for all places alike. The delicate child should be sent to school

only as he can be without prejudice to his health; and though all power to regulate school attendance is and must be vested in boards of education, and the administration of their rules must be, to a greater or less degree, left to the discretion of the teacher, the wishes of careful and thoughtful parents ought, in public as well as in private schools, to be respected in this matter. On the other hand, in all our cities, and too frequently in our smaller towns and villages, there is a class of children who are neglected at home by idle, improvident, ignorant, and even vicious parents—whose school is the street and whose teachers are of the criminal classes. This class of children ought to be kept in school as many days in the year and as many hours in the day as possible.

Between these two classes, one of which should be kept out of school the most of the time and the other kept in school, if possible, all their waking hours, there is almost an endless variety, for each of which provision should be specifically made, were it possible to do so. There is, therefore, nothing left us but to meet, as far as we can, the average condition of childhood. But we are compelled to speak not only of the average child, but of the average schoolroom and average teacher. There are schoolrooms, and too many of us see them at times, which should lay boards of education liable to indictment for maintaining nuisances; and there are deaths of little children which, if subjected to thorough-going and honest inquest, would lay boards liable to indictment for manslaughter; that is, if criminal neglect and carelessness can ever be reached by penalties of law. There are teachers, too, who ought never to have the charge of a schoolroom. They are of an unhappy temperament themselves, and they seem to have a subtle skill in making everybody about them unhappy, especially little children. In such schoolrooms and under such teachers, it would be well if the school hours were reduced for the average child to less than three hours per day. On the other hand, we may imagine schoolrooms with such surroundings and under the care of such teachers—educators, rather—as would make attendance at school a continual source at once of delight and profit, to be interrupted only that the holy ties of the home might be maintained unimpaired.

I have spoken of these possible extremes in the character and condition of the children to be taught, and in the circumstances under which they are to be taught, that I may thereby possibly

forestall a discussion which might be of little practical utility, because presuming upon wholly impossible conditions. We have to come then to the solution of the question really before us. What school hours would this Association recommend for little children between six and ten years of age—that is, for the average child in ordinary schools? Let me give my answer, and the reason therefor.

For the first two or three months I would not keep children in school more than three hours per day, an hour and a half in the morning and an hour and a half in the afternoon. From that time on till nine years of age, four hours per day are sufficient; and not only sufficient, but longer confinement I should judge to be prejudicial to mental as well as to physical development. From nine to ten and thereafter, five hours per day are enough.

Now I can not take the time to say all that ought to be said in way of limitation and modification of the general law announced. It must be remembered that I speak of the average child and the schools as they generally are.

For the first three months, then, an hour and a half in the morning and an hour and a half in the afternoon is all that ought to be required; with one proviso, however, that whenever it be possible an arrangement be made at school for the care of the little children of the working-women during the hours of recess. This much of discrimination ought to be exercised, may, must and will be, in our larger cities at least, either by means of classification of schools or by other special means. Do you ask why an hour and a half in the morning and an hour and a half in the afternoon? Why not three hours in the morning, and, as some have proposed, bring another class of children together in the afternoon, it may or may not be with a change of teachers. In reply I have to say that the average teacher has not versatility and power enough to keep children in the first three months of school going, pleasantly and profitably, for three hours continually engaged. Nor if they had, are the schoolrooms adapted to the exercise which the children need in the first weeks of confinement—following years of unrestrained liberty.

But they have only a short time to attend school, and they can not afford to waste their time, says the objector. I answer that the element of time and the value of repetition is greatly overestimated. When the mind is in the right state, as the

photographic plate is when put into the camera, the impression is almost instantaneous, and too long exposure only confuses the impression, and repetition without attention tends almost to fatal dissipation of the powers of thought. It seems to me that the abstraction of thought, which sometimes makes the child appear stupid in the eyes of the teacher, is the very means by which his natural intellect is preserved from stupefaction. Again, I would have two sessions in the day, because I would have the child form the habit of going regularly to school, as his father goes to work, morning and afternoon. It is the commencement of the discipline of life. Let me say here, that at times the school authorities may be compelled to have half-time schools, as they are called, to hush the clamor of those whose children would be otherwise crowded out because of the want of room. But it seems to me that no measure could be attended with greater hazard, if ever this expedient assume the authority of custom.

What I have said about the first three months of schooling may be said with slight variation of the periods which follow. As the muscle, bone, and brain harden and strengthen by air and exercise, the hours of confinement in the schoolroom may be increased, but not proportionally. It must be remembered that as self-control assumes its sway, continuity and intensity of application increase in greatly accelerated ratio, and that it is true in the action of the mind as in the working of machinery, that, as you increase the pressure, the wear and tear increases in more than geometrical ratio. I have said, therefore, that, for the pupils of the higher classes, five hours of school work per day are enough.

Let me say, in conclusion, that while I think I have recommended what is desirable and practicable to-day, I have not indicated the direction which true progress will take. In the schools of the future I believe that the younger children, children from four to eight or ten years of age,—children who at home would depend upon wise and loving parents for the direction of their plays or sports,—that children at that age will have the advantage of the sole attention of wise and loving educators (not teachers) in the kindergarten, educators that understand the wisdom of leaving the human spirit sufficiently alone, that it may grow according to its own law, and yet will know how to supply the conditions of growth. In such schools the hours of exercise and instruction—absorption, I ought say—

will be increased, and six hours will not be considered too much. In the higher schools of the future, when the hours of conscious effort come, in the higher classes of the grammar school and the high schools, the hours of instruction and labor will be reduced.

PREPARATION FOR TEACHING.

"Nay, sir," said Dr. Johnson of dancing dogs, "the creature, it is true, dances ill, but the wonder is that it should do it at all."

Those who have reflected most upon education and the work of teaching, have been most impressed with their importance and difficulty. Montaigne says, "But, in truth, all I understand, as to this particular, is only this, that the greatest and most important difficulty of human science is the nurture and education of children." Horace Mann had, no doubt, well weighed his words, when he said that "education is the profoundest of all sciences and the most difficult of all arts." And yet, in no other work of life, is the proportion between the preparation for that work and the difficulty of its accomplishment, so great as in that of teaching. It would seem that "the greatest and most important difficulty of human science" requires the least preparation; and that "the most difficult of all arts" requires the least of that kind of knowledge, which throws its light into the future, enabling us to see the end from the beginning. In no other profession, perhaps, are gray hairs and ripe scholarship at so great a discount in the presence of youthful inexperience and presumptuous learning.

This is more especially true in our own country where the state has done so little to enable or encourage teachers to prepare for their work, and where the art of teaching, if it comes at all, is expected to come by nature, like Dogberry's reading and writing. The great majority of teachers have been obliged to enter upon their work not only without opportunities of preparation, but to a great extent without being led, by any means, to understand its importance or its necessity.

If, therefore, some of us have entered or are now entering our profession without any such preparation as would certainly be expected in the most common branches of business, or if, in the course of the years we have been teaching, we have spoiled

our hats' full of eyes in our experiments in intellectual surgery, who is to blame? Certainly not the teacher. He has but obeyed the demands of the community for just such labor; and in most cases he has conscientiously performed his work according to the best of his ability. The man who defined hazardous to be a female hazard, was no more culpable in undertaking that for which he was in no way fit, than the community that gives encouragement to attainments but little higher. It is true that we have taught ill; but is it not a wonder that we have done no worse? That we have been poor teachers, has not been *altogether* our own fault; that we should be content to remain so, without using every available means for our improvement, would, indeed, be our shame. Let us, therefore, "ever be awake and in quest of light, never counting ourselves to have apprehended, but pressing towards higher truths, and a larger knowledge."

There are improvements in methods yet to be made, and skill and discipline in the use of them yet to be acquired, of which we can now form but an imperfect idea. Mr. J. S. Mill, in speaking of the reforms that are possible in methods of education, says:

"But I am as unwilling to speak all that I think is practicable in the matter as George Stephenson was about railways, when he calculated the average speed of a train at ten miles an hour, because if he had estimated it higher, the practical men would have turned a deaf ear to him, as that most unsafe character in their estimation, an enthusiast and a visionary. The results have shown in that case who was the real practical man. What results would show in the other case, I will not attempt to anticipate."

It is not unreasonable to hope, at least, that, in the future, there may be improvements in methods and teachers, that what is now poorly taught in ten years, may then be well done in half that time.

I have said "improvements in methods and teachers", for improvement in the latter is clearly necessary as a means of accomplishing the former. Improve the teacher, and improvement in methods follows as a necessary consequence; while improvement in methods will be quite impossible without improvement in the teacher. Of the four combinations, 1. Good teachers with good methods, 2. Good teachers with bad methods, 3. Bad teachers with good methods, 4. Bad teachers with bad methods, the first and fourth only are possible; while the

incompatibility of the second and third is apparent upon the slightest reflection.

This is the more evident if we judge of the teacher from the results of his teaching, rather than from his good intentions. A very well meaning man may employ bad methods, but his good intentions or his zealous efforts should not entitle him to be known as a good teacher. Many can testify that they have always had the greatest desire to find and adopt methods to secure the best and most permanent results, and yet such was the darkness in which they groped, that they never felt quite sure of the ground upon which they stood. Our calling surpasses all others in difficulty and importance, and yet where can we find a Blackstone in education, to whose *commentaries* we can resort with the assurance of finding the principles of our art so expounded, that, after having mastered them by diligent study, we shall have such clear views upon the end to be attained, the nature of the being to be educated, and the instrumentalities and methods to be used, that we may without fail bring about the most desirable results? It has been said, that "the history of education has been the battle-ground and the burial-ground of impractical theories." But who has given us such faithful portraitures of those buried theories as to enable us unmistakably to detect their resurrected forms in our own day? Who has so delineated the "*fittest*" that have survived the severest struggles for life, that we may readily recognize them in our own practice and in the teaching of others whose work may come under our own observation? Eminent teachers of all ages have experimented upon methods, and have left on record the results of their experience. Philosophers, ancient and modern, have brought their powers to bear upon the subject of education, and have handed down to succeeding ages the result of their investigation. But these treasures of the past have never been brought within the reach of the great mass of teachers. Being left entirely without this knowledge of the past, each teacher, to a great extent, is left to the ever recurring successes and failures of his own, it may be, long experience without even then learning to distinguish the former from the latter. "Surely long experience doth profit much, but most and almost only to him that is before diligently instructed in precepts of well doing. For good precepts of learning be the eyes of the mind, to look wisely before a man which way to go right, and which way not. Learning teacheth more in one

year than experience in twenty; and learning teacheth safely when experience maketh more miserable than wise. He hazardeth sore that waxeth wise by experience. An unhappy master is he who is made cunning by shipwrecks; a miserable merchant that is neither rich nor wise, but after some bankrouts. It is costly wisdom that is bought by experience."

It may be true, that "the dearth of great minds and able men is the stern comment of God and nature upon our unwholesome systems of education"; that a great thinker can not find in Boston, with all the education of its people, "a fair share of originality of thought"; that there are just grounds for an article in an able periodical, "On the Artificial Production of Stupidity in our Schools"; and that "teachers are a dead weight upon all educational progress"; but is it not a wonder that things are no worse? The responsibility must rest with our statesmen and people, who will not learn what Dr. Hoyt believes to be the most valuable discovery of the educational world to the present, to wit, "That poor teachers are worse than no teachers"; that "to the provision of competent instructors may be traced the excellence of whatever schools are excellent, of whatever grade, or wherever found."

Cleveland, Ohio. J. B.

PARAGRAPHS FROM PLATO'S REPUBLIC.

SELECTED BY W. H. VENABLE, CINCINNATI, O.

First Impressions.

The beginning is the chiefest part of any work, especially in a young and tender thing; for that is the time at which the character is formed and most readily receives the desired impression.

Art.

Let our artists rather be those who are gifted to discern the true nature of beauty and grace; then will our youth dwell in a land of health, amid fair sights and sounds; and beauty, the effluence of fair works, will meet the sense like a breeze, and insensibly draw the soul even in childhood into harmony with the beauty of reason.

Music.

Is not this the reason why musical training is so powerful, because rythm and harmony find their way into the secret places of the soul, on which they mightily fasten, bearing grace in their movements, and making the soul graceful of him who is rightly educated, or ungraceful if ill-educated; and also because he who has received this true education of the inner being will most shrewdly perceive omissions or faults in art and nature, and with a true taste, while he praises and rejoices over, and receives into his soul the good, and becomes noble and good, he will justly blame and hate the bad, now in the days of his youth, even before he is able to know the reason of the thing; and when reason comes he will recognize and salute her as a friend with whom his education has made him long familiar.

The Good Soul Improves the Body.

My belief is, not that the good body improves the soul, but that the good soul improves the body. * * * Then if we have educated the mind, the minuter care of the body may properly be committed to the mind. * * * Neither are the two arts of music and gymnastic really designed, the one for the training of the soul, and the other for the training of the body. I believe that the teachers of both have in view chiefly the improvement of the soul. * * * And he who mingles music (literature) with gymnastic in the fairest proportions, and best attempers them to the soul, may be called the true musician and harmonist in a far higher sense than the tuner of strings.

Education Checks License.

Our youth should be educated in a stricter rule from the first, for if education becomes lawless, and the youths themselves become lawless, they can never grow up into well-conducted and virtuous citizens.

Education in Play.

And the education must begin with their plays.

Education Determines Man's Career.

We may assume that the direction in which education starts a man, will determine his future life.

Female Education.

Women must be taught music and gymnastic, and also the art of war, which they must practice like the men.

Relative Capacity of Man and Woman.

You are quite right in maintaining the general inferiority of the female sex; at the same time many women are in many things superior to many men. In the administration of a state, neither a woman as a woman, nor a man as a man, has any special function, but the gifts of nature are equally diffused in both sexes; all the pursuits of men are the pursuits of women also, and in all of them a woman is only a lesser man.

Fine Natures Suffer Most by Bad Education.

We know that when any seed or plant, whether vegetable or animal, fails to meet with proper nutriment or climate or soil, the greater the vigor, the greater the need also of suitable conditions, because, as I imagine, soil is a greater enemy to the good than to the not-good. There is reason for supposing that the finest natures, when under alien circumstances, receive more injury than the inferior, because the contrast is greater.

And may we not say that the most gifted minds, when they are ill-educated, become the worst? Do not great crimes and the spirit of pure evil spring out of a fullness of nature ruined by education rather than any inferiority, whereas weak natures are scarcely capable of any very great good or very great evil?

The Philosopher's Progress.

In childhood and youth their study, and what philosophy they learn, should be suited to their tender age; let them take care of their bodies during the period of growth, and thus philosophy will have her instruments ready; as the man advances to mature intelligence, increasing the gymnastics of the soul; but when their strength fails, and is past civil and military duties, then let them range at will and have no other serious employment, as we intend them to live happily here, and, this life ended, to have a similar happy destiny in another.

The Highest Knowledge.

The idea of good is the highest knowledge, and all other things become useful and advantageous only by their use of this. * * * Do you think that the possession of the whole world is of any value without the good? or of all wisdom, without the beautiful and good?

The Soul like the Eye.

And the soul is like the eye: when resting upon that on

which truth and beauty shine, the soul perceives and understands, and is radiant with intelligence.

Education the Directing of the Soul.

Then certain professors of education must be mistaken in saying that they can put a knowledge into the soul which was not there before, like giving eyes to the blind. * * * The power is already in the soul; and, as the eye can not turn from darkness to light without the whole body, so too, when the eye of the soul is turned round, the whole soul must be turned from the world of generation into that of being, and become able to endure the sight of being, and of the brightest and best of being—that is to say, of the good. And this is conversion; and the art will be how to accomplish this as easily and completely as possible; not implanting eyes, for they exist already, but giving them a right direction, which they have not.

Arithmetic.

How ingenious the science is! the very mention of it suggests that; and how conducive, in many ways, to our desired end, if pursued in the spirit of a philosopher, and not of a shopkeeper! * * * Arithmetic has a very great and elevating effect, compelling the soul to reason about abstract number, and if visible or tangible objects are obtruding upon the argument, refusing to be satisfied. * * * This knowledge may be truly called necessary, as necessitating the use of pure intelligence in the attainment of pure truth. Those who have a natural talent for calculation are generally quick at every other kind of knowledge; and even the dull, if they have had an arithmetical training, gain in quickness, if not in any other way.

Geometry.

Then, my noble friend, geometry will draw the soul towards truth, and create the mind of philosophy, and raise up that which is unhappily now allowed to fall down. Moreover, the science has indirect effects, which are not small. There are the military advantages, and, in all departments of study, as experience proves, any one who has studied geometry is infinitely quicker of apprehension.

Useless Studies.

I am amused at your fear of the world, which makes you guard against the appearance of insisting upon useless studies;

and I quite admit the difficulty of convincing men that in every soul there is an organ which is purified and illuminated by these studies, when by other pursuits lost and dimmed; and this eye of the soul is more precious far than ten thousand bodily ones, for this alone beholds the vision of truth. Now there are two classes of persons: one class will agree in this, and will take your words as a revelation; and the other class will have no perception of the thing meant, to whom they will naturally seem to be idle and unprofitable tales.

Dialectic.

Dialectic is the coping-stone of the sciences, and is placed over them; no other can be placed higher: the nature of knowledge can go no further.

Youth the Time for Toil.

Solon was under a delusion when he said that a man as he is growing older may learn many things,—for he can no more learn than he can run; youth is the time of toil.

Education not to be Forced.

A freeman ought to be a freeman in the acquisition of knowledge. Bodily exercise, when compulsory, does no harm; but knowledge which is acquired under compulsion, has no hold on the mind. Then, my friend, do not use compulsion, but let early education be a sort of amusement; that will better enable you to find out the natural bent.

NATURAL SCIENCE IN COMMON SCHOOLS.

THE WORKING OF THE SCHOOL LAW OF ILLINOIS.

The school law of the state of Illinois, approved April 1st, 1872, provides that no teacher shall be authorized to teach a common school in the state, who is not of good moral character and qualified to teach orthography, reading in English, penmanship, arithmetic, English grammar, modern geography, the elements of the natural sciences, the history of the United States, physiology, and laws of health. Another provision of the law is as follows:

"Every school established under the provisions of this act shall be for the purpose of instruction in the branches of education prescribed in the qualifications for teachers, and in such other branches, including vocal music and drawing, as the directors or the voters of the district at

the annual election of directors may prescribe: *Provided*, that county superintendents or boards of examiners may, on request of directors, grant certificates to teachers who do not possess the qualifications for teaching the elements of natural science, physiology, or the laws of health."

This law went into effect July 1st, 1872.

In view of the general and increasing interest felt in popular instruction in the sciences, it is proposed to present, for the information of all interested, a brief sketch of the operations of the law thus far.

It ought first to be stated, that "the elements of natural science" as used in the law are construed by the State Superintendent to include an elementary knowledge of natural philosophy, botany, and zoölogy. In a circular referring to the subject, he has defined very clearly the general scope of the law, limiting it to instruction in the general principles and leading facts of each study.

For the purpose of having as reliable data as posssible from which to form an opinion, a circular was recently issued to all the county superintendents of schools in the state, asking a series of questions. Replies have been received from forty nine of the one hundred and two superintendents in the state. Since the counties they represent are situated in all parts of the state, it is presumed that their answers may be taken fairly to indicate the situation throughout the whole state.

The first question was, "What is the number of certificates granted by you from the first of October, 1872, to the first of September, 1873?"—a period of eleven months. The aggregate of the answers is 6,618. It should be stated that a large number of teachers had their certificates renewed just before the present law went into effect, a fact which accounts for the smallness of the number given in this answer.

Second question, "Of this number, how many were special, that is, granted at the request of school officers that the examination in the sciences be waived?" The answers give 2,324, a fraction over 35 per cent. It may contribute to a more intelligent understanding of this answer to know that in twenty-two counties, school trustees are required to state in their request for a special certificate that they are unable to procure a teacher having a full certificate. Twenty-three superintendents require simply the request. The others do not specify. This difference in practice arises from different constructions of the law.

The third question, "What has, on the whole, been the effect of the addition of the sciences to the requirements for examination, upon the instruction given in the schools of your county?" In answer to this question, a great variety of opinions have been expressed. Eight superintendents out of the forty-nine report that there has been no appreciable effect. Twenty-eight of them state that the effect is for good, some of them being quite strong in their convictions on this point. Some state that in a few schools—those that are graded—the effect is very salutary, while in the mass of the country schools no attention can be given to the added studies. Others say that there is a tendency on the part of teachers to teach them to the exclusion of the old studies, and that the result is pernicious. The beneficial effects of the law are attributed, not so much to the formation of classes in the new studies and instruction in them directly, as in the new strength given to teachers. From their own increased knowledge, they can present the subjects of their daily exercises with greater variety and force of illustration, and have greater power to control and interest their whole school. A new spirit has been infused into their school-room life. Their pupils have caught the enthusiasm, and they are disposed to observe more carefully and to think more independently.

Fourth question, "What has been the effect upon the wages of teachers?" Twenty-eight of the superintendents report no perceptible influence. Fourteen report wages increased variously from a "a slight advance", to fifteen or twenty per cent. A few say that teachers having full certificates command larger wages, while the mass of teachers have the same or possibly a little less income. The law has operated to drive some of the most conservative of the older teachers from the calling. They were very good instructors in the old studies, but their professional spirit was so slight that they would not be to the trouble of preparing themselves to teach the new studies. Their places have been supplied by a class of inexperienced teachers, and so the schools have suffered and wages have been depressed temporarily.

Fifth question, "What has been the effect upon the supply of teachers?" Twenty-five superintendents state that the supply has not been materially affected. Eighteen of them report the supply diminished, in some cases, as much as twenty or twenty-five per cent. In many counties the supply was not equal to

the demand at first, but it is ample now. It may be remarked that the very general preparation of teachers to do the work required of them by the new law, is owing to the interest of county superintendents in holding during the summer, institutes of from three to six weeks each, in which instruction was chiefly given in the added studies. The interest in these gatherings has, in some cases, been so great as to secure the almost universal attendance of the teachers of the county.

Sixth question, "What is the general feeling among the people concerning the propriety of the added studies?" The answers to this question show a very diverse popular feeling. Reports from twenty-six counties state that the people consider the law unnecessary, if they are not averse to it; several report an approval of it in towns, but opposition to it in the country; a few say that the people are favorable to it when they fully understand its objects; ten counties report the people satisfied with the law or favorable to it. In some instances there is a division concerning the studies selected. Wherever any choice is expressed, the first preference is given to physiology, next to natural philosophy. Some think that it would have been better to introduce only one of the new studies at first, letting others follow as the desirability of that one is established.

Seventh question, "Is this feeling any different from that entertained when the law went into effect? If so, how?" In twenty-one counties the feeling is more favorable, or, as some state, "there is less opposition to the law." Of this number, fourteen may be considered opposed to the law at first. The rest were favorably inclined toward it, or quietly acquiesced in it. No county regarding it with favor at first, has become averse to it. Three report that the feeling of opposition is intensified. In the other counties, there seems to be no appreciable change in public sentiment.

In what has been said, the attempt has been made simply to present the most reliable data for forming an opinion concerning the situation of instruction in natural science in Illinois; to show those interested in the movement, what occasion there is for encouragement, what ground for apprehension, what necessity for persevering effort, if they would see the movement for popularizing this instruction, here inaugurated, achieve the success its friends desire.

Peoria, Ill., Oct. 1873. S. H. WHITE.

EDITORIAL DEPARTMENT.

—— Our December number will contain a very interesting and valuable paper on "Religious Instruction in German Schools" by our regular correspondent in Germany, Prof. W. H. Young, U. S. Consul for Baden and Alsace-Lorraine; an excellent paper on the teaching of Physical Geography by Prof. E. B. Andrews, of Ohio; a live paper on a live topic by Dr. A. D. Mayo, now of Massachusetts; and other papers of great practical value. We intend to make the closing number of the volume worthy of its predecessors.

—— We recently requested Prof. S. H. White, of the Peoria Normal School, Ill., to furnish our readers with an account of the practical working of the provision of the new school law of that state, relating to the natural sciences. In his usual thorough way of doing work, he addressed a series of questions on the subject to county superintendents, and his very valuable paper published in this number, embodies the results of the inquiry. This testimony of forty-nine of the county superintendents of Illinois will be welcomed by all who are interested in the more general introduction of elementary instruction in science in public schools. It is certainly very suggestive, as well as instructive. It seems to indicate that the elements of the natural and physical sciences will first be taught, with few exceptions, in the graded schools of cities and villages, and that the success of such instruction will secure its gradual introduction into the schools of country districts. We think that the school law of Illinois is right in demanding that teachers shall be qualified to give this instruction, but permitting local boards to determine to what extent the added branches shall be taught in the schools. The fact that more than half of the teachers of Illinois can not pass a satisfactory examination in the common branches (this is certainly true in Ohio), may cause the adding of several other branches to seem unreasonable, but we believe that the results will show that the study of the elements of science will not reduce the knowledge of teachers, as a class, of the common branches, while it will give them increased power and higher success in their work. It may be true, as the Illinois experiment indicates, that examiners, teachers, and pupils will at first neglect the fundamental branches, but experience will doubtless correct this error.

—— There is a noticeable disposition in this country to advocate the engrafting of monarchical features upon our American system of public education. There has even been an expression of regret that the National Bureau of Education has no authoritative control of the school systems of the several states. It would evidently be pleasant for some educational reformers to hear the tinkle of Mr. Seward's bell, which was

so effective in the late war. It is quite boldly urged that the state should exercise the authority in education hitherto vested in local school officers as the immediate representatives of the people, and the attempt has been made in several states to organize school systems on the Prussian model, but the people have not been long in asserting their authority. This tendency toward a monarchical system of schools was manifested in the address of Dr. McCosh at Elmira, who asserted, in effect, that the absence of authoritative supervision is the great defect in the elementary schools of the United States. He commended the Irish system of school supervision as the best known to him, specially referring to the monarchical feature of the system, which gives the National Board authority to direct the management and instruction of the schools. A peremptory order issued by the Board is the remedy, if any defect pointed out by the inspectors is not corrected by the local directors. It is admitted that such supervision as this may be very efficient, but, with due deference to Dr. McCosh, we maintain that a different system is demanded in this country, one that shall leave the local management of the schools more in the hands of the people. We need, it is true, a better organized system of school inspection, state, county, and local, but we do not want either the Irish or the German system. The people of this country are accustomed to manage their own affairs, and, using the best ideas and suggestions within their reach, they have established elementary schools, which, according to the testimony of Dr. McCosh, rank as high as those of any country in the world. The state superintendent should have power to see that the law is executed, but his authority in local school management should depend on the value of his ideas and the weight of his facts, suggestions, and arguments.

—— We have received a reprint copy of Prof. Atherton's replies (at Elmira and in the N. Y. *Tribune*) to what is called Dr. McCosh's "attack" on the Agricultural Colleges. Referring to Dr. McCosh's address, we find this "attack" consists, in substance, of the statements, (1) that these institutions are producing very few agricultural students (some not any), and as agricultural schools they are not accomplishing so great good as to entitle them to an additional endowment by Congress; and (2) that as schools of science or schools of technology they are no more entitled to national aid than other like institutions. To the first of these statements, Prof. Atherton replies that it is a "sheer fallacy" to test the usefulness of these institutions by asking how many "farmers" they have educated, since they are not agricultural colleges, though commonly but "erroneously" so called; that their value is to be determined by the amount of work they are doing for "popular education." To Dr. McCosh's second statement he replies that "whether the government ought to aid one institution and not another is purely a question of expediency." Prof. Atherton not only virtually admits the failure of the so-called Agricultural Colleges as agencies for the special education of farmers, but he maintains that the "broad purpose" of the grant was to provide a "liberal and practical education for the industrial classes",

not necessarily to teach manual farming or the mechanic arts. Statistics are presented to show the success of the "universities" and "colleges", thus established, as institutions for general education. If this view of the act of Congress is correct, the institutions endowed by it have no distinctive character. They may be universities, or ordinary colleges, or schools of science, or schools of technology, since all of these institutions teach some subjects "*related* to agriculture and the mechanic arts." This view does not remove the objection to their receiving additional aid from Congress. So far as we can see, Dr. McCosh's statements are not refuted.

—— WHATEVER may have been the "broad purpose" of Congress in endowing the Agricultural and Mechanical Colleges, it must be conceded, we think, that the special design of the act was to found institutions for the special education of farmers and mechanics, in the same sense that medical schools educate physicians, theological schools theologians, and normal schools teachers. This was evidently intended to be the "leading object" of these institutions "in order to promote the liberal and practical education of the industrial classes *in* their several pursuits and professions of life." In view of the fact that the proposed special education of farmers and mechanics is of very questionable utility, it is fortunate that the act is so worded as to admit of the broad interpretation given to it by Prof. Atherton. No one can deny the value of these institutions when they are made thorough literary o scientific schools. They lose, it is true, their distinctive character, but they do a work of recognized and proved utility. It is possible that they may be kept within the limits of the act of Congress, if they simply open their doors to "the industrial classes", whatever this may mean. There is a demand for well-endowed schools of science, and we hope that many of the so-called Agricultural Colleges may meet this demand.

—— ONE of the most praiseworthy acts of the last Congress was the passage of a stringent law for the suppression of obscene literature. The investigations made revealed a circulation of vile books and prints in the country at once humiliating and startling. In one year, Anthony Comstock, of Brooklyn, seized and destroyed, chiefly in New York City, more than 182,000 obscene pictures, the plates of 142 obscene books, and more than 5 tons of obscene books and pamphlets, and an incredible amount of obscene plates and cards and articles designed for immoral uses. An agent of the Young Men's Christian Association of New York seized last year more than fifteen thousand letters ordering obscene books and articles—letters chiefly written by students of both sexes, in schools of every class. It is found that circulating libraries of obscene literature have been secretly organized in some schools, and among the seizures in New York were twenty separate orders for obscene books, "from the librarian of public schools in one of our proudest western states." The dealers in this vile literature obtain the addresses of

students by means of catalogues and reports, and then forward secret circulars and catalogues. We have gathered the above alarming facts from the speech of Hon. Clinton L. Merriam, of New York, in the House of Representatives, advocating the enactment of the law above referred to. It is certainly high time that the strong hand of the Government should be effectually laid on this nefarious and diabolical business.

—— We have somewhere seen the statement that a teacher has no evidence that he has taught a truth until he has caused the pupil to give accurate expression to it. The practical acceptance of this principle would make a revolution in current teaching. Too much of the time in our schools is consumed in the repetition of memorized lessons by the pupils and in talking and explaining by teachers. The pupils are not sufficiently drilled in the clear and accurate expression of their knowledge in their own language. This is not only satisfactory evidence that the pupil knows what he is reciting, but it is a fine drill in the use of language—one of the principal objects of every recitation. We hope that the time may soon come when due attention will be given in our schools to the pupils' use of language in the recitation.

—— A number of the *Marietta Olio* contains an article by President Andrews on "The Use of Titles." He states that *Mr.* is not a title of distinction, and hardly one of courtesy, but it is not courteous to omit it when others are inapplicable. It may be followed by the surname or by the full name, as Mr. Jones, or Mr. Paul Jones. Military titles, as General, Colonel, etc., civil titles, as President, Governor, Judge, etc., ecclesiastical titles, as Bishop, Pastor, Deacon, etc., and professional titles, as Doctor, Professor, etc., may, like *Mr.*, be followed either by the surname or the full name. They may also be placed after the name or before it. We may say General Sherman, or General W. T. Sherman, and his official signature is W. T. Sherman, General. Most of these titles may be preceded by *Mr.*, but none can be followed by it. We can say Mr. Secretary Fish, but not Secretary Mr. Fish. The titles of Reverend and Honorable never follow the name, and neither of them form any part of an official signature. They are simply titles of respect. *They are never followed directly by the surname, but always by the christian name or by another title.* Good usage forbids our saying Reverend Beecher or Honorable Morton. "We may say Rev. Wm. Addy, Rev. Mr. Battelle, John Boyd, D.D., Rev. Dr. Hawks, or Rev. Mr. Stone, D.D.. but we may *not* say Rev. Addy, or Reverends Battelle, Boyd, Hawks, and Stone."

—— The opening of the Art Normal School in Boston, which will occur in a few weeks, will be the fourth important step taken by Massachusetts for the promotion of art education. Her first step was the enactment of a law making drawing a prescribed branch of common

school education, the same as reading or arithmetic. Her next step was a law requiring all towns and cities of over ten thousand inhabitants to open evening industrial drawing schools for adults. Her third step was the employing of a "State Director of Art Education", who is also superintendent of drawing in the public schools of Boston. Two exhibitions of the work done have been held, the first in May, 1872, and the second in May, 1873, and the results are reported as very satisfactory and the progress so marked as to satisfy the most skeptical, though the *Boston Literary World* asserts, "as a matter of justice to Mr. Bartholomew", the first teacher of drawing in the Boston schools, that his exhibition of the drawings of the pupils in 1870 was superior to any since made. "To him mainly", it adds, "are we indebted for the recognition of drawing as a permanent department of study." We have had good reasons to believe that Mr. Bartholomew did an excellent work in the Boston schools, and that his system of teaching produced good results. But we do not see how his success lessens the importance or value of the different work which Mr. Smith is doing. It may not be too early for those on the ground to decide respecting the relative merits of the two systems, but they seem to us so different in aim that we must wait for more light—for the practical results.

—— A FRIEND, who has given much attention to primary reading, thus comments on our recent remark that "the pupil should also be so taught that he may determine new words":

"I shall look with much interest for what you promise more on this subject. In my judgment the pupil should learn new words *in the sentences* where they are used and not simply as *words*, before using them in the sentence. From my experience and observation, I think spelling by *sounds* and nearly all the drills on sounds, otherwise than in *words*, are worse than useless exercises. I do hope that the time may soon come when a little good common sense shall be brought to the work of teaching children to read, such as the carpenter uses in teaching an apprentice his trade. Do help, not hinder, the good time coming."

We are never quite able to understand our correspondent when he writes or speaks on this subject. He seems to have some method in his mind of which we are ignorant, and, not having this key to his meaning, we fail to apprehend it. When a child, we learned new words in sentences, except those which we learned from the spelling book. When reading, we halted at the new words until we could "make them out", or until the teacher helped us over them. Is this the method which our friend has in mind? Or is it the "Thought and Sentence Method", which Supt. Farnham, of Binghamton, N. Y., presented at Elmira, and which the reporters so successfully muddled? Will our friend tell our readers in plain English how a little child should be taught to read?

—— MR. BOLTON'S reference to the want of a "Blackstone in education" touches a great defect in our educational literature. There are several works which present, with more or less fullness, the author's views and methods, but we do not know of any one work which embodies, in a satisfactory manner, the results of the best experience of the profession. The preparation of such a work would require an intimate

acquaintance with educational literature, wide experience and observation, and ability of a high order. It would truly demand a "Blackstone in education." Moreover, there has never been a time, at least until the present, when the sale of such a treatise would compensate the author for its preparation. The best works on education, yet published, have had a comparatively limited sale. Few teachers ever purchase a work on teaching, or even subscribe for an educational journal, except at the solicitation of those interested in their improvement. Is not the profession about ready for the appearance of its Blackstone?

—— We have received several letters requesting us to publish a list of the best works on the "Theory and Practice of Teaching", now published. It is difficult to decide which works are the "best." One work is the best for one class of teachers, while a different work is best for another class. Some works are best for primary teachers in graded schools, and others are best for ungraded schools. Of the older educational works, which have been read with profit by many teachers, we name Page's Theory and Practice of Teaching, Northend's Teacher's Assistant, Northend's Teacher and Parent, and Holbrook's Normal Methods of Teaching (A. S. Barnes & Co., New York), and Ogden's Science and Art of Teaching (Moore, Wilstach & Moore, Cincinnati). Marked progress in teaching and school management has been made since these works were written, and hence they do not fully meet the wants of progressive teachers. Of the more recent works we name Wickersham's School Economy, Wickersham's Methods of Instruction (J. B. Lippincott & Co., Philadelphia), Sheldon's Elementary Instruction (Scribner, Armstrong & Co., New York), Calkin's Object Lessons (Harper & Brothers, New York), Holbrook's School Management (Geo. E. Stevens & Co., Cincinnati), Sypher's Art of Teaching School—always excepting the theory of education on which it is based (J. A. Bancroft & Co., Philadelphia), Spencer's Education (D. Appleton & Co., New York), and Hart's "In the Schoolroom" (Eldredge & Bro., Philadelphia). The last two works named are composed of educational papers; they are not manuals on teaching. There are many other educational works, some ably presenting special departments of education.

WRITING IN COUNTRY SCHOOLS.

Within a few months we have received several letters calling attention to the neglect of writing in country schools, and asking us to bear emphatic testimony against it. We have been somewhat slow to believe that the second of the famous original "Three R's" is in danger of losing its place in any American school. But we are satisfied that writing is not only very poorly taught in many schools, but that, in too many cases, it receives no attention. In a recent teachers' institute in Pennsylvania, the fact was disclosed that a number of the teachers present

do not teach writing, and a still larger number permit only a few of the older pupils to write. In one school, composed of pupils from six to twelve years of age, there was no writing last year, though considerable time each week was devoted to "rhetorical exercises", of very doubtful value.

There is no excuse for this state of things. The three branches which should be thoroughly taught in every elementary school are reading, spelling, and writing. These should receive attention, though other branches be neglected, and each should be taught from the child's first term in school to the last. The old notion that children should not be permitted to write until they are ten years of age, was long since exploded. Every child that attends school with any regularitv, should write a neat and legible hand before he is ten, and this is accomplished in our best schools.

When we taught country schools, writing was a daily exercise, and nearly all the pupils were members of the writing class. As we were obliged "to set the copies" and mend the pens, the exercise involved not a little labor. If teachers in those days had neglected writing, there would have been some reason in the plea of a want of time, for it took time to write a score of copies and mend as many quill pens. But the introduction of metallic pens and admirably arranged copy-books has changed all this, and the only labor now required of the teacher of writing is to conduct the exercise. The copies for the slate exercises of the smaller pupils can be written on the blackboard, and, of course, only one copy is needed for such exercise. There is no valid excuse for a neglect of writing.

A writer in *The School* (W. W.) attributes this neglect to the failure of examiners to test the ability of teachers to teach writing. He urges that a good handwriting is not an evidence now of qualification to teach penmanship. It is more important that the teachers be able to explain the letters and copies on the blackboard, and this qualification examiners should determine. If this was generally done, it would not be long, he claims, before teachers would qualify themselves to teach penmanship efficiently, and the branch would receive due attention in the schools.

This prepares the way for the remark that it is not sufficient that writing have its due place in the daily programme. *It should be thoroughly and systematically taught.* It is true that a good handwriting may be acquired by simple practice, with correct copies as models, but it is sooner acquired when this practice is guided by proper instruction. Not only should the teacher personally direct the exercise, but the copy should be explained on the blackboard, and faults should be pointed out and corrected. Neither copy-books nor charts, nor both, can supersede the use of the blackboard in teaching writing. More efficient instruction can be given on the blackboard in one minute than can be given in any other way in five minutes. Copy-books and charts are valuable helps in teaching writing, but neither nor both can take the place of the living teacher.

The first important step in teaching writing in an ungraded school is to classify the pupils. Experience has shown, we believe, that the best plan is to divide the pupils into three divisions or classes, the lower to include all who write on slates. The three classes should write at the same time; and the exercise of the lower classes should not exceed thirty minutes. The pupils in each of the two upper classes should use the same copy-book or, more properly expressed, a copy-book of the same number. Two numbers, one for each class, will be found sufficient. To enable the teacher to give instruction on the blackboard, all the pupils in each class should write the same copy at a given lesson. The diffculties in the way have been easily overcome by so many teachers, that we will not stop to consider them.

The teacher can give attention to the classes successively, beginning with the primary or lower, the pupils in the upper classes being engaged meanwhile in practicing on loose paper. It will take but a short time to explain each copy and give the necessary directions. When the three classes are engaged in writing, the teacher should pass among the pupils of each class successively to observe faults, commend faithfulness, and give assistance. The general faults observed should be pointed out on the blackboard, all the members being required to give close attention. The teacher should thus faithfully occupy the time allotted to the writing lesson of the two lower classes. When their lesson closes, they can engage in other work or exercises, while the highest class spends a few minutes more in practice without the teacher's personal attention. Writing can thus be successfully taught in ungraded schools.

We have reserved the difficulty of securing a supply of copy-books and other writing material, for special consideration. This difficulty is a very serious one in schools situated at a great distance from places where these articles are kept for sale. We hope the time will soon come when boards of education will supply schools with pens, pencils, ink, paper, copy-books, drawing books, and other like material. The supply of these articles by the individual pupils is everywhere a very great inconvenience and loss. Parents are greatly annoyed by frequent unanticipated calls for pencils, pens, sheets of paper, etc., and the delay in purchasing causes serious loss to the pupil and to the school. All such articles should be provided at the public expense—whatever may be true of the policy of thus supplying text-books. Until this is done, teachers of country schools, at least, must provide a supply of them for their pupils. We should not now think of taking charge of a country school without carrying with us a supply of pens, pencils (slate and lead), crayons, paper, silicate leaf-slates, and ink. Most of the pupils would, of course, pay for the articles furnished them, and we should not suffer a very heavy loss. This would be more than made good by the important advantages secured by it.

We trust that the above testimony may be sufficiently "emphatic", and that the suggestions offered may be of practical value to some of our readers.

CLASS DRILLS IN ORAL SPELLING.

It is not our present purpose to consider the merits of the oral method of teaching spelling, but to submit a few suggestions respecting its use, which, for the sake of brevity, we put into the form of directions.

1. Young pupils should copy the spelling lesson on slate or paper *as a part of its preparation.* The eye must be trained to recognize the written form of words. If the lesson is written carelessly or incorrectly, the work should be done over. Young pupils should divide words into syllables by means of a hyphen—not a *dash*, the length of the hyphen as compared with the width of the letter *o* being noticed. Too great a distance between the syllables destroys the natural appearance of words, and thus subverts one very important object of the exercise of writing the lesson.

2. To secure accuracy in copying the spelling lesson, require your classes "*to read*" *the words assigned from the slate*—not from the book. Without some such check, pupils will form careless habits in copying, and thus fail to fix the exact written form of words in the mind. In this reading exercise the words words should be properly divided into syllables, and each syllable *correctly pronounced.* The pupils schould not be permitted to pitch their voices upon a high key and drawl out the words. The "spelling tone", so common in our schools, is an intolerable nuisance. The other extreme of mumbling the words, should be carefully avoided. Each element and syllable should be enunciated distinctly, in a full, natural tone of voice.

3. In conducting the spelling exercise, *always have a high standard.* As a general rule, teachers of spelling assign too many words for a lesson. No more words should be assigned than the pupils can fully master with reasonable diligence. Instead of being able to spell *most* of the words pronounced, they should spell *every* word with accuracy and certainty. This should be the standard. Anything less than this is evidence of a want of thoroughness. If pupils know they can miss *one* word creditably, they will care less about missing two or even more. We have known teachers to fix their standard even lower than one word, looking upon two or three failures in twice as many trials as very creditable spelling. Indeed, many teachers have no standard at all. We are aware that perfect accuracy can not be secured in classes composed of pupils of unequal attainments. A few failures may be made to occur. Still this fact does not make the standard a nominal one. Perfect accuracy is the aim of the pupil; for this he studies. Even one failure disappoints and nerves him to the effort "to do better."

4. In addition to the requirement of accuracy, the teacher should secure *the spelling of every word* before the pupil is released from the task. An excellent plan is to require the pupil to write each word missed by him from five to twenty times on slate or paper. The teacher should see that the work is neatly and accurately done. Another plan is to require pupils to remember every failure, and write the words missed upon the

blackboard. These words may be kept upon the board, spelled daily, and finally all reviewed weekly or monthly, or both. This can easily be done, if very few failures occur, and in well drilled classes this can always be secured.

5. *Permit but one trial on a word.* The once very common error of permitting pupils—especially young pupils—to try a *second* time before regarding their efforts a failure, is even more ruinous in its influence than a low standard in regard to the number of words missed. If a pupil can not spell a word correctly the first time, he does not *know* its orthography. A success or failure after that is the result of mere guessing. It is true that correct spelling on the first trial may be a lucky guess. The skillful teacher will, however, soon learn to detect a *doubt*, and give the pupil the benefit of a second guess which may not prove so fortunate! We need not condemn the pernicious habit of helping pupils through a word by shakes and nods of the head, by approving smiles and telling frowns, and all that sort of folly. Such conduct is a *vice* in the schoolroom, and should be eradicated; and yet we have seen teachers of small children go even farther than this, by actually articulating the letters. We now recall one or two instances of examining a class with the teacher at our back trying to "telegraph" what she had been accustomed to communicate with less trouble!

The practice of permitting pupils to assist each other by signs, whispering, etc., makes the spelling exercise a farce and a mockery. If this is done by the pupil adroitly and deceitfully, it becomes an abomination. Such an exercise might very properly be called *a lesson in lying by means of spelling.* A drill in spelling should throw a pupil upon his own knowledge and resources, completely and thoroughly. There should be no guessing or assisting.

6. *Try to make pupils miss.* The custom of pronouncing all the words of a spelling lesson in order and each word but once, is a dull and almost useless routine. One object of a spelling exercise is to fix the exact orthography of each word in the memory; to "set" the impressions received during study. Now the orthography of most English words is natural or easy; other words are spelled artificially, and are known as difficult words. The orthography of the word *men*, for example, is natural, and is remembered without special effort; that of the word *mien*, on the contrary, is artificial, and is liable to be misspelled. The difficult words in each lesson should receive the most attention. They should be pronounced and repronounced, and in such a manner as to make each pupil *know he is right.* The habit of saying "next" only when a word is missed, and always pronouncing another word as soon as the last is spelled correctly, should be avoided. This is an assistance to the pupil, and it destroys self-reliance. He knows from the last pupil's spelling how *not* to spell the word, and is thus assisted to spell it correctly.

7. Words whether spelled correctly or incorrectly should often be passed to other pupils, and *always in such a manner as to prevent one pupil's depending upon the spelling of another.* We regard this an important suggestion. The best teacher of oral spelling we have ever known,

was very skillful in this direction. "Next" simply passed the word to another for his spelling, and neither the tone nor the countenance of the teacher gave a trace of a decision as to the last pupil's effort. Indeed, the "evidences" were very liable to mislead the dependent pupil. Her spelling classes were always wide awake and attentive; for while her pupils generally spelled "by turn", the exceptions were so numerous that each member of the class was obliged to spell, mentally at least, every word. No one really knew to whom a word was coming for a second trial. It was very likely to fall just where it was least expected. She pronounced the words rapidly, and the spelling was instantaneous, if at all. In a few weeks, she established among a class of careless, guessing, uncertain, blundering spellers, habits of accuracy and certainty. Her pupils did not use each other for crutches. She *tried* to make her pupils miss, and when she could not succeed, she called the exercise "a good recitation."

An excellent plan to secure independence in a spelling class is always to pronounce the next word, not indicating whether the last word was spelled correctly or incorrectly. If a word is spelled wrong, it is the business of the pupil to notice the error and correct it before spelling the word assigned to him. All who permit a misspelled word to pass should be marked as failing.

8. *Pronounce the words correctly.* There are two very common errors in pronouncing words. One consists in giving a wrong *vowel sound* in unaccented syllables. This is sometimes done *humanely* to keep pupils from missing. The word grammar, for example, is pronounced, without accent, gram-*mar;* edible, ed-*i*-ble; vanity, van-*i*-ty; syl-*la*-ble, etc. The other error is the opposite of this, and consists in *mumbling* all unaccented syllables, omitting consonant elements, and reducing all short vowels to an obscure short *u* or *i*. The word excellent, for example, is pronounced *ex-sul-unt;* government, *gov-ur-munt;* separate, *sep-rit*, etc. It is true that unaccented vowels have alike the sound of short *u* in many words. In other words, however, each of these vowels has its own short sound, though obscure. The voice should certainly mark the difference between these short vowels in unaccented syllables, whenever such difference exists. Every word should be pronounced in a spelling exercise precisely as it would be spoken in *distinct, slow reading.* The voice should be natural. Avoid the "spelling tone." Unless a pupil is deaf, never repeat a syllable by itself.

9. *Secure the correct pronunciation of each syllable.* We find very few classes taught to pronounce the first syllable of such words as *away, afraid, enough, Italian*, etc., or the last syllable of *pity, lily, many*, etc. In speaking these words, what element represents the single vowel? This sound should be given as the pronunciation of the syllable in spelling. It is also quite common to permit pupils to pronounce syllables incorrectly. The third syllable of hypocrisy, for example, is pronounced as a syllable with *i* long, but as a part of the word with *i* short. Now each syllable should be pronounced by itself precisely as when the whole word is spoken.

Great care should be taken to avoid the error, which is found in some

of our readers, of separating final *ed* from the preceding letters, when it is not thus separated in the proper pronunciation of the word. Hatched (pronounced *hatcht*) should not be divided into two syllables, as *hatch-ed*. The *ed* should be united with the other letters, and the whole pronounced as a word of *one* syllable.

10. *Review often and advance slowly.* The practice of taking classes half through a speller every term, is a great mistake. The mere fact that a class can spell all the words of a lesson the next minute after closing the book, is no evidence the same can be done in one week, one day, or even in one hour. But the value of a spelling exercise depends upon the permanency of its influence. If lesson after lesson is assigned, spelled, passed by, and forgotten, the exercise is in a measure profitless. The orthography of words can only be fixed in the memory by constant and persistent reviews. The difficult words of the preceding lesson or lessons should be brought up daily. Nor is this enough. Let every fifth exercise be a review of the last four.

The plan of examining classes upon every ten lessons of the speller before permitting them to advance, is a good one. The test should be thorough and searching. At least ninety-five per cent of the words pronounced should be spelled correctly as a condition of advancement. If a perfect standard is insisted upon in each daily exercise, not more than five per cent of the difficult words of ten lessons should be missed in an oral test or examination. Proceed with the next ten lessons in the same manner. Review and examine. Then review the preceding ten lessons, and examine the class on the twenty lessons. Then advance ten more lessons, reviewing and examining as before.

11. *Interest your pupils in spelling;* be interested yoursef; abhor poor spelling; set your face against it; drill, *drill*, DRILL.

EDUCATIONAL INTELLIGENCE.

—— WHEN notified that a subscriber has failed to receive any number of this journal due him, we always remail it.

—— PROF. JOHN F. STODDARD, author of Stoddard's Arithmetics, died at his residence near Newark, N. Y., August 6th, after a long illness.—— Prof. William Russell, the accomplished elocutionist and author, died at his home in Lancaster, Mass., August 16th, in the seventy-fifth year of his age.

—— MRS. JOHN OGDEN proposes to form a training class for Kindergartners at 181 East Long Street, Columbus, Ohio, where she is conducting a genuine Kindergarten. The members of the training class will have the opportunity of acquiring both theory and practice at one-half of eastern rates, the charge for the entire course being only $50.

—— THE first premiums of Brown University in both Latin and Greek were awarded to students prepared by Prof. Merrick Lyon, principal of

the University Grammar School. We visited Prof. Lyon's school a few months since, and left it with the belief that he is one of the best classical teachers in the country. We are glad to notice his safe return from Europe.

—— The number of students in the West Chester State Normal School, Pa., has increased to 235, nearly all of whom are pursuing the regular normal course. The large building has not sufficient capacity to accommodate all who apply for boarding, and it is proposed to enlarge it. The school is in charge of Prof. George L. Maris, formerly superintendent of Chester county.

—— In the recent mathematical examination of Cambridge University, England, a young lady reached the rank of "Senior Optime", and two others passed satisfactorily the examination for the classical Tripos, one of them surpassing all others examined in a knowledge of Aristotle. All three were educated in colleges for women, and yet they carry off the highest university honors.

—— Rev. S. Fallows, D.D., has resigned the office of State Superintendent of Public Instruction of Wisconsin, to accept the presidency of the Illinois Wesleyan University.——Dr. T. L. Griswold, late superintendent of the schools of Oswego, N. Y., succeeds Rev. John Hewitt, resigned, as principal of the Bloomsburg State Normal School. Pa., and Dr. J. N. Fradenburg, of Fredonia, N. Y., has succeeded Prof. C. H. Verrill, resigned, as principal of the Mansfield State Normal School, Pa.

—— Prof. John Williams, of Lancaster, O., has made some curious discoveries in relation to the system of curves, which has for its first member the circumference of the circle; for the second, the involute of the circle; for the third, the involute of the involute, etc., *ad infinitum*. These discoveries include a simple method of calculating the lengths of all the members of this infinite system of involutes, and sundry very interesting facts connected with the summation of these series. He proposes to publish the results of these discoveries and investigations.

—— Rev. John Davis, principal of the Third Ward School, Allegheny City, Pa., has been elected city school superintendent, at a salary of $2,000. The office was created Sept. 2d, and the superintendent elect enters on his duties in November. Supt. Davis has had large experience in teaching, and he has visited many of the best schools in the country, thus making himself acquainted with their organization and management. He is the author of a work on Astronomy and the inventor of several astronomical instruments. The next step of progress to be taken by Allegheny City is the establishment of a good high school.

—— The Illinois Normal University has recently been subjected to much unjust criticism, but its prosperity seems to have been promoted rather than injured. It opened on the 8th of September with 311 students in the normal department and 167 students in the model school. For some reason the very best normal schools in the country have been

most vigorously assailed by writers who think they have solved the normal problem. We have long regarded the Illinois Normal University one of the very best conducted institutions of its class in the United States. We have seen nothing in recent criticisms to cause us to change our high opinion of its efficiency and usefulness.

—— MORTIMER M. LEGGETT, son of Commissioner M. D. Leggett, of the U. S. Patent Office, formerly one of the leading teachers and school superintendents of Ohio, was recently killed while going through the "preliminaries" to an initiation to one of the secret societies of Cornell University. He and two other students were led blindfolded to the brink of a precipice, and all three unwittingly fell over into a deep ravine. Young Leggett lived but half an hour, and his two companions were seriously injured. Commissioner Leggett exonerates the students who conducted the initiatory preliminaries, from any intention to injure his son. It is hoped that this sad termination of a senseless performance, which college boys suppose to be very funny, will result in its abandonment.

——AT the recent meeting of the "Irish Catholic Benevolent Union" in St. Louis, a resolution declaring that the present system of public schools is "a curse to our country. and a floodgate of atheism and sensuality, and of civil, social, and national corruption", was recommitted by about a two-thirds vote. The following resolution, reported as a substitute, was unanimously adopted:

Resolved, That the system of state education, now established in most of the states, by its failure to provide for the proper religious instruction of the young, and its enlightening the head to the entire neglect of the heart culture, meets our unqualified reprobation; that it unjustly taxes a large class of our people, who can not without danger to the faith and morality of their offspring, avail themselves of its advantages.

Most of the speakers strongly endorsed the original resolution, but Mayor Keily, of Richmond, Va., who is *ex officio* president of the school board, and several other eastern delegates wished it so changed as simply to favor Catholic schools. This discussion is significant.

——THE Catholic children have been very generally withdrawn from the public schools of New York City and Brooklyn, and placed in parochial schools established by the Catholic Church. A thousand children were taken from the public schools in one of the wards and marched with banners to a new and costly edifice erected for a parochial school. As the children passed their old school, they gave it three cheers! This withdrawal of the Catholic children is not due to the religious exercises or instruction in the public schools, but to the fact that these schools are not under Catholic control and influence. The announced policy of the Catholic Church is to educate all its youth in Catholic Schools, and, to this end, it demands a division of the school fund.

KENTUCKY.—The meeting of the State Teachers' Association, held in Winchester, Aug. 12th and 13th, was attended by fifteen of the one hundred and sixteen county school commissioners in the state, and by about one hundred teachers. Hon. H. A. M. Henderson, State Superin-

tendent of Public Instruction, presided. The subject of coëducation compulsory education, vocal music, English grammar, and text-books, each received atttention. Dr. J. B. Reynolds, of Louisville, read two papers, one on "Instruction in the Natural Sciences", and the other on "Graded Schools." Prof. C. H. Theiss, of Millersburg University, also advocated the value of scientific studies. Mr. George A. Chase, of Louisville, gave an excellent lecture on "The Teacher at Work", which elicited an interresting discussion. The condition of school affairs in the state was cousidered in several impromptu discussions, some of which were very pointed and spicy. The proceedings of the meeting indicate that Kentucky is pervaded by an earuest spirit of educational progress, which is quietly but surely working a revolution in public sentiment.——The *Home and School* states that while there is a reported in crease of 10,703 pupils in the public schools, there is a decrease of $241,857.91 in the school funds. This unexpected diminution will cause a reduction in the wages of teachers, and otherwise unfavorably affect school interests.

Ohio.—Most of the teachers' institutes are now held in the summer months, a large number being held in August. This arrangement enables the committees to secure the services of the superintendents and teachers of the graded schools in cities and towns, as instructors, and it has the further advantage of placing the institute before the opening of the schools, thus giving teachers the opportunity of making the most of the instruction received, though a later session might be of more value to teachers whose schools do not open earlier than November. But the arrangement has also its disadvantages. It makes "instituting" a very *warm* business, and the attendance of citizens is not as large as it would be in cooler weather, with a consequent loss in popular influence. Institute instructors can receive employment for only a few weeks in the year, and hence no one can afford to make special preparation for the work, with a view of engaging in it as a business. It is too early to determine the full effect of the provision of the new school law, which gives teachers the right to dismiss their schools to attend the county institute for a week, without loss of pay. It will doubtless result in the holding of more institutes in the autumn. The reports received from the institutes held this year in Ohio, indicate that the attendance and interest were about the same as last year. There was a decided gain in a few counties and a loss in several others.

Central Ohio Teachers' Association.—The meeting of this Association held in Dayton, Oct. 17th and 18th, was attended by about three hundred teachers, representing the graded schools in central and southwestern Ohio. The delegation from Columbus was *sixty* strong. In the absence of President Welsh, School Commissioner Harvey was called to the chair. He delivered an able address on the educational condition and prospects of Ohio. Prof. John Ogden, of the Ohio Central Normal School, read an interesting paper on "Child Life", which was followed by an illustration of Kindergarten teaching by Mrs. Ogden, who has charge of the Kindergarten in Columbus.

The afternoon session was opened with singing by forty pupils from Principal Morris's school, Dayton. Miss Bristle, of the Fifth District School, conducted an exercise in map drawing with a class of fourteen pupils, each of whom drew a well-executed map of Africa. This was followed by an address on map drawing by parallel and meridian lines by Supt. George S. Ormsby, of Xenia. He gave a very clear and satisfactory explanation of the use of his "Map Drawing Scale." An excellent paper on "Primary Instruction" by Supt. Ellis, of Hamilton, closed the afternoon session. There was a lecture in the evening in the Third Presbyterian Church.

The session on Saturday was held in the hall of the Soldiers' Home, the "Home" band furnishing excellent music. Prof. McFarland, of the Ohio Agricultural and Mechanical College, made a few remarks on the teaching of mathematics. Supt. Hancock, of Cincinnati, read an excellent paper on the common errors in the use of the new methods of teaching, which was briefly discussed. This paper will be published in our January number. Principal Watkins, of Dayton, gave a brief and suggestive address on "The Fundamental Ideas of Geography." The fact that these ideas are not made clear and definite, was held to be one of the chief causes of the unsatisfactory results of geographical teaching. President Orton, of the Ohio Agricultural and Mechanical College, read an excellent paper on "Natural History in Common Schools." The following officers were elected for the ensuing year: President, Hon. T. W. Harvey; vice-president, Supt. S. C. Wilson, Dayton; secretary, Supt. A. Ellis, of Hamilton; executive committee, Col. Frambes, of Columbus, Supt. C. W. Oakes, of Bellefontaine, and Supt. W. W. McCray, of Logan. It was voted to hold but one session each year, and the Association adjourned to meet at the call of the Executive Committee.

After the adjournment, the members partook of an elegant and bountiful dinner, served in the dining hall of the Home by the teachers of Dayton. After dinner a few minutes were spent in visiting the buildings and the beautiful grounds of the Soldiers' Home.

Mt. Union College.—The late commencement of this institution was an occasion of unusual interest. At the close of the exercises of the graduating class, addresses were delivered by Governor Noyes, Mrs. H. M. Tracy Cutter. M.D., Dr. Vincent, of New York, Lewis Miller, Esq., Hon. W. D. Henkle, and C. Aultman, Esq. Governor Noyes paid the young ladies of the class a high compliment, and earnestly indorsed the co-education of the sexes. He commended the trustees for their generous offer to increase the endowment to $1,000,000 when there is a regular attendance of 1000 students. At the Alumni meeting, Rev. J. M. Carr, of Massillon, gave a history of the institution, from which we learn that $100,000 worth of zoölogical specimens, many the very rarest, was added to the museum of natural history last (?) year. It was also stated that the number of different students in attendance the past year, was 832.

Dayton.—The public schools have made a very promising opening, with harmonious and earnest coöperation on the part of all concerned in

their management. The City Normal School, which has entered on its fourth year, is now devoted to the special work of training primary teachers. It is in charge of Principal Watkins, of the Second District School, assisted by Miss Emma A. H. Brown, who has special charge of the practice department, the primary schools in the building being used for this purpose. The school has twelve pupils. It is an honor to Dayton. The school board recently voted to pay the primary teachers $50 a year more than is paid the teachers in the next five grades above the primary—a significant innovation.

——The number of pupils registered in the public schools of Indianapolis the year ending June 20, 1873, was 8,179, and the average number in daily attendance was 5,306. The number in attendance less than four months was 1,947; the number in attendance more than six months was 5,290; and 2,550 pupils attended ten months. Indianapolis has an excellent system of schools.

——The number of school districts in the state of Pennsylvania is over 2,000; the number of school directors about 13,500; teachers employed in the common schools, about 18,500; pupils enrolled, over 800,000; total number of schools, 16,000, of which 5,000 are graded schools; total annual cost of the system, nearly $9,000,000; and the estimated value of school property, in round numbers, about $20,000,000.

BOOK NOTICES.

A Progressive Grammar of the English Tongue: Based on the Results of Modern Philology. By Prof. William Swinton, A. M. New York: Harper & Brothers.

We have found it very difficult to form an intelligent opinion respecting the merits of this work as a text-book. The fault must be ours, for many competent judges pronounce it a superior treatise, and the very features which most perplex us, are most strongly commended. Under these circumstances the most we can venture to do is to give a brief description of the more characteristic features of the work. Orthography and Prosody are omitted and to Etymology and Syntax are added Analysis and Construction, and Composition. In Etymology all the parts of speech are first defined, next their sub-divisions are given, and then their inflections—each being thus taken up three times. Such definitions as "Nouns name things", "Verbs make statements", and "Conjunctions connect statements", take the place of the usual definitions. The treatment of Syntax presents the widest departure from the usual method. The parsing of the several parts of speech, beginning with the verb, is followed by what is called "Practical Syntax", which consists of numerous directions, notes, illustrations, and exercises, designed to teach the correct use of words in English. No rules of syntax are given in parsing, and many of the general rules in Practical Syntax are unique. Analysis and Synthesis are united in part third and part

fourth is a brief treatise on composition writing. Indeed, the leading aim of the work is to teach the correct use of the English language, rather than to present it as a science, and, to this end, the traditional nomenclature (with some exceptions), definitions, and rules are entirely discarded. It presents with unusual fullness the results of modern investigations in philology. The copy of the work sent us is marred by literary imperfections which subsequent revisions have doubtless corrected.

PHYSICAL GEOGRAPHY. By ARNOLD GUYOT, Author of "Earth and Man." New York: Scribner, Armstrong & Co.

Too many of our text-books on Physical Geography are mere compilations, but here is an original treatise, prepared by one who has made the science a specialty, and who is doubtless the highest authority on scientific geography in the country. But this work is more than an original treatise by a master of his specialty. It is also a *text-book*, admirably adapted to the wants of American schools, and illustrating the spirit and methods of the best American teaching. The author's success in this direction far exceeds our expectations. Every page of the book shows that it was written from the stand-point of the American school; that it is a text-book to be studied by the pupil and supplemented by the teacher. The style is concise and sententious, and the arrangement logical and natural. The analysis at the close of each section is a valuable feature. The maps are excellent both in contents and execution, and the illustrations are pertinent, instructive, and beautiful. The work is published in the best style. It should be remembered by school boards and teachers, that this work is designed for pupils of the high-school grade. It is not an elementary treatise.

FIRST FOUR BOOKS OF THE ANABASIS OF XENOPHON; with Notes, a Map of the Expedition, and a Complete Vocabulary. By ASAHEL C. KENDRICK, LL.D., Professor of Greek in the University of Rochester. New York: Sheldon & Co. 1873.

Among the many editions of the classics that have recently issued from the American press, few deserve higher praise than the present volume. The name of the editor is a guarantee of thoughtful scholarship and painstaking accuracy. The text is, in the main, that of Dierdorf. The notes are brief—though fuller than in the excellent Anabasis of Prof. Boise—but comprehensive and judicious, aiding the student where he most needs aid, directing his attention to the delicate shades of meaning in which, in its copious inflections and numerous particles, the Greek is preëminently rich, and which are so apt to escape the learner. They are perhaps more elementary in character than in most previous editions, which, considering the early age at which this classic is often read and the inefficiency of much of the preliminary instruction in Greek, we should consider an advantage. Some attention is given to rhetorical points, which are too frequently neglected by both editors and teachers. Frequent references to Hadley and Bullion guide the pupil to that familiarity with the grammar so essential to scholarship. A concise historical introduction, and the useful Ilinerary from the edition of Macmichael are prefixed, and a full and comprehensive vocabulary

added. The typography is particularly clear and beautiful, and the volume altogether most attractive. If the learner does not fall in love with Xenophon, it will be the fault of neither the editor nor the publishers.

THE FAIR GOD; or The Last of the Tzins. A Tale of the Conquest of Mexico. By Major-General LEW. WALLACE. Boston: James R. Osgood & Co.

The above is the unique title of one of the few rare novels that may be called historical. It reaches back centuries ago to that mystic yet real nation, the Aztec, portraying with lifelike distinctness a civilization in strange contrast with our own. The descriptions are so striking and original that the very incidents of battle and social life seem to the entranced reader real scenes passing before his eyes. The chapters containing a description of the Page lost in the old "Cû" are startling, and his happy rescue admirably shows forth the author's powers of imagination grandly. The whole book is so entertaining that it is difficult to make a choice of parts. We think, however, that books six and seven are the most interesting. To all in search of "the greatest American novel", we commend this as the one most worthy of that distinction. It is handsomely published in a volume of 586 pages. A. B. W.

NEW BOOKS RECEIVED.

The Philosophy of Education; or, "Pedagogics as a System." Translated by Anna C. Brackett from the German of Carl Rosenkranz, Professor of Philosophy at the University of Königsberg. St. Louis: Gray, Baker & Co. Price, bound in muslin, $1.50; in paper, $1.00

Surveying and Navigation, with a Preliminary Treatise on Trigonometry and Mensuration. By A. Schuyler, M.A. Cincinnati and New York: Wilson, Hinkle & Co. Price, $2.50.

Kindergarten Culture. For the Use of Mothers and Teachers. By W. N. Hailman, A.M. Cincinnati and New York: Wilson, Hinkle & Co. Price, 75 cents.

A Grammar-School Spelling Book. By B. F. Tweed, A.M. Boston: Lee & Shepard.

Pronouncing Handbook of Words Often Mispronounced. 3000 Words. By Richard Soule and Loomis J. Campbell. Boston: Lee & Shepard.

Analytical Geometry, with Applications to Lines and Surfaces of the First and Second Orders. By William G. Peck, LL.D. New York and Chicago: A. S. Barnes & Co. Price, $1.75.

Commentary on the New Testament. Designed for Christian Workers. No. 1. Matthew: Chapters 1 to VII. New York and Chicago: A. S. Barnes & Co. Price, 25 cts.

American Educational Reader. No. 5. New York and Chicago: Ivison, Blakeman, Taylor & Co.

First Steps in Music. No. 4. By Geo. B. Loomis. New York and Chicago: Ivison, Blakeman, Taylor & Co.

Science for the People. No. I: The Unity of Natural Phenomena. From the French by M. Emile Saigey. Boston: Estes & Lauriat.

PAMPHLETS AND CATALOGUES.

Circulars of Information of the United States Bureau of Education. Nos. 1, 2. and 3, 1873. John Eaton, Jr., Commissioner.

An Essay on Fish Culture. By John H. Klippart, Columbus, Ohio.
Manual of the Union Schools of Chardon, O. W. S. Hayden, Supt.
Hillsdale College, Hillsdale, Mich. Rev. Daniel Graham, D.D., Pres't.
Ohio Central Normal School, Worthington, Ohio. M. H. Lewis & John Ogden, Principals.
Ridgeville College, Ridgeville, Ind. Rev. S. D. Bates, President.
Western State Normal School, Farmington, Maine. C. C. Rounds, Prin'l.
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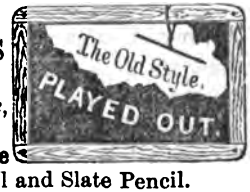

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RELIGIOUS INSTRUCTION IN GERMAN SCHOOLS.

One of the marked features of German elementary schools is "religion-teaching." Religion is as much a necessary part of every child's course of study as is arithmetic or reading. Further, the Bible is the basis of all religious instruction, is largely the textbook, and, strange as it may sound to American ears accustomed to the great ado about the "Bible in the public schools", *no one here ever objects to it.* This may be partly accounted for by the provisions for supplying the schools with the religious teaching of the several prominent confessions; but this is not a full explanation, for Germany is, by common consent, the hot-bed, or better the ice-field, of rationalistic infidelity, and yet every body expects his children to be taught the religion of the Bible in the schools, public and private. Perhaps this is no compliment to the "religion" that is taught, perhaps it is not creditable to the moral sincerity or religious depth of the people; perhaps it is a proof of a shocking *indifferentism:* but, allowing all this, there is still another explanation, further back, that accounts primarily, if not directly, for the whole. The present Germany has grown out of the political, social, and religious conflicts precipitated by the Reformation,—an era from which Protestanism, and after it Catholicism, has felt that its hold upon the people and its power in the state must be in ratio to its educating influence on the children. Hence not only were all elementary schools originally confessional, but their *confession was the prime consideration.* Statesmen

of that day and later, whatever may have been their views on popular education in the abstract and to whichever confession they belonged, could not fail to see that the strength of their own party in the state, or of their state in the (religious) struggles of states, depended on the *grounding of their people in their confession:* and even when secular education came to be looked upon as a strong factor in national stability and prosperity, the confessional antagonism still remained, thus keeping up the reason for religious instruction in the schools on *confessional as well as political grounds.* But, again, however rationalistic the better educated German leaders, they believe in the need of something more evangelical for *the masses.* Putting this and that together, and allowing full force to the consideration that long-continued habit is even more than second nature in the German character, one may understand how provision for regular religious instruction comes to be embodied in every German common-school law, and how it is that every child is and *must be taught "religion."*

Another remark or two, however, will throw a little more light on the general question. These German states all have state churches, sometimes Protestant, sometimes Catholic, sometimes both, while in most of them both churches are officially recognized as "religious confessions." The Jews also are recognized as a distinct "confession." There are, then, these distinct confessions (no others are recognized) to be provided for in the schools. Now it is one of the facts of German religious and social growth and life, that almost invariably the small communes consist of people of one confession, while the larger ones have enough of each to entitle them to school provisions for religious teaching. Thus the matter is practically simplified far beyond what could be attained in mixed communities, denominationally made up as in the United States. True, there are other sects in Germany, but being inconsiderable in number and influence, and officially unrecognized by the states, their children are required to select from the three confessions above named for religious teaching in the schools. Further, just as among Catholics in America, the practice of church confirmation of children at about fourteen years of age is almost universal among both Catholics and Protestants in Germany. This religious ceremony being fixed by law at the date or age corresponding in most cases with the child's passing from school into business life, the event has come to be a na-

tional custom, more marked even than the attainment of majority, and is always celebrated not only with church ceremonials, but with quite imposing family festivities—something like putting on the old Roman *toga virilis*. It is always a *real event* in German communal, family, and child life that few church officials, parents, or children could bear to see passed over. As all this, then, is thoroughly incorporated into the German civil, religious, and social system, the time of confirmation corresponding with graduation, so to say, from the common school, and as passing an examination is by church and state law as indispensable to the former as to the latter, it becomes plain enough why the thought of common schools without religious instruction never enters the German popular mind. One scarcely needs suggest the utter inapplicablenes of all thiss to American life and institutions. Still, in view of the interest attaching everywhere to the question of religion (or the Bible) in the schools, the longer experience of these old states, as indicated by present results and status, may offer interesting and useful hints.

General Organization.

In every German state, the church and state being connected, each government has distinct departments of "public worship" and "instruction", or the two united in one, or, as in smaller states, church matters and school matters constitute subordinate branches of one of the greater departments.

The Grand Dukedom of Baden — 1,000,000 Catholics and 500,000 Protestants — having attained to a church-and-school position among the most advanced states through recent severe struggles, in which the liberal victory was hardly won by a union of Protestants with advanced Catholics, affords a fair view of the best results yet attained.* In Baden the public schools, the Protestant and the Catholic churches constitute three distinct and coördinate branches of the department of the interior, each having its superior council or an equivalent, which is charged, subject to the departmental ministry, with framing suitable ordinances and putting into effect the general laws. In respect of religious instruction, the law provides that every pupil in the schools shall receive weekly three hours instruction in religion during the entire eight years' course. The

* Always excepting the fact that Baden does not yet dare to trust women teachers in her public schools, chiefly because the way would be open to Catholics to put *theirs* under charge of "sisters."

superior school council simply provides in the weekly school-programme, always the same for the same grade of school, the required "hours" for "religion", while the superior church councils determine each for its own confession the matter and manner of instruction and other appropriate details. The pastor in Protestant and the priest in Catholic communes is always an *ex officio* member of the local school board, and is directly responsible to his immediate clerical superiors for the religious schooling of the children. Protestant teachers are all qualified in their teaching certificate for giving religious instruction, and Catholic teachers, of late years, are receiving Episcopal permits to "teach religion in the name of the church." But still the pastor and priest respectively are supervisors of this part of schoolwork, and actually do much of it in the higher classes, while their immediate superiors in the church test the work by annual examinations. The head-teacher of every school and the pastor (or priest) always being members of the local school council, there is seldom trouble now-a-days in arranging details, though, within a short period, the refusal of catholic clericals to sit in the school councils or mix in secular school matters caused much embarrassment and friction. This abstention was for a time systematically practiced under Episcopal orders, in the hope of breaking down the present law (only a few years old), but the contest has been given up, and all is working smoothly, as set forth above. In mixed schools the work of religious teaching is divided up by teachers, pastors, priests, and rabbis, each being sufficiently jealous for his own flock to secure good work, and sufficiently under control of law and public opinion generally to ensure fair play. It should be observed that the teacher is bound to teach his full number of hours only, and that he has only the same voice in the "local council" with the other members, including the pastor or priest, so that any question between him and the clericals as to the portion of religious teaching to be done by him, is settled by the council.

Matter and Manner of Instruction.

These are very similar in the three confessions, except that, compared with Protestant work, the Catholic makes far more of the peculiar tenets and claims of Romanism proper, while the Rabbi make all of the Old Testament. It is especially observable at the lessons, that Catholic children are being impressed with priestly and papal authority, the divinity of the God-

mother, the exclusive merits of "the church", etc., while Jews are constantly directed to the attributes of the one unchangeable God and the merits and claims of the Law. Keeping this in mind, it will be enough here to note Protestant teaching.

Religious instruction is divided into Bible history connected with Bible geography, Bible reading, Bible knowledge, catechism, spiritual songs, memorizing psalms, proverbs, and prayers, explanation of the church year, and somewhat of church history and music. Books are all prescribed and mostly prepared by the superior church council.

First Year: Bible stories, marked passages of catechism, hymns, hymn-stanzas, prayers, simple texts, and melodies from the choral,—all arranged for seven-year children, and taught orally.

Second Year: Bible stories (or narratives more in detail), in summer from Old and in winter from New Testament; connected texts; passages from catechism; hymns and choral singing,—mostly oral.

Third Year: Similar to second, but more from text-book and more advanced.

Remaining Five Years (of course systematically graded and arranged): Bible reading, as prescribed by church authorities; the entire catechism; church hymns, with reviews of former years' work; continued exercises in the choral to the extent of knowledge of and ability to sing alone the greater part thereof. All the above instruction is generally given by the teacher. The pastor gives, besides, to the higher classes—that, is, the classes of the last five years—instruction in Bible knowledge, exposition of the catechism, explanation of church-year (festivals), and church-history, Bible narratives or history in connection with their teachings in faith and morals.

Every school session, forenoon and afternoon, is opened and closed with singing and prayer, and also every "religion-hour." The prayer is always a memorized one, which is repeated by one pupil, while all the others stand with bowed heads and clasped hands. The children lead in this prayer by turns, while the prayer itself is adapted to the class-age. There are in these state churches many holy-days, which for the schools are always *holidays*. The religious instruction about the times of the holy-days generally bears thereon, while the children must attend divine service on the day itself. The pastor, as before stated, has oversight of all the religious instruction of

the school, and is measurably responsible therefor to his church superiors, while he is also expected to watch over the religious and moral conduct of the youth of the commune, and require their regular attendance at church, in which latter duties the teacher is expected to assist. There is never any thought that a *teacher* may be an *irreligious* man in the German sense of that term.

At the end of each school year, the local clericals hold a religious examination in connection with the annual school examination, wherein pastor and teacher perform their appropriate parts, and at which the local school council and the local church council are supposed to be present. These examinations are duly reported upon to the higher church authorities. The circuit dean or diocesan has general superintendence over the religious instruction of the schools of a diocese. As often as once in two years, a special religion-examination must be held in each school before a diocesan committee. Every three years, and in connection with a triennial church-visitation by higher church-officials, the school religious instruction comes again under review. Further, extra examinations may be ordered at any time by the superior chuch council. The church officials are expected to report to their superiors upon the moral and religious conduct of the teacher, as well as upon his ability, fidelity, and general fitness as an instructor of children in "religion." This report is carried to the superior school council, and, if unfavorable, tells severely against the teacher.

Such is a sketch in brief of the principles and practice, both as to matter and management, of religious instruction in German elementary schools. In the higher schools, it is much more elaborately and systematically prescribed as well as carried proportionally further; for the same principles and similar practice prevail in all schools not strictly technical, male and female, public and private, below the grade of universities.

Results.

All German children get a good child's knowledge of morals, domestic and social duties, Bible, church, and ecclesiastical matters. Their Bible knowledge is really considerable and very creditable. They are required to attend church pretty regularly during school years—that is, to the age of fourteen. During this period, also, they are not allowed, under penalties inflicted upon the keeper, to frequent public houses. Boys of

this age are never seen there. Hence, up to this time, children are rather religious in training and observances, and seem generally not to be immoral in conduct.

On the other hand, religion is taught, in the main, precisely as geography or arithmetic, simply as a thing to be learned and used on occasion, with almost no indication of truly religious impression—that is, in the sense in which Americans understand religious impressions. One can hardly find fault with the principle, while the system is elaborate, very complete in details, and carried out with extraordinary care and seeming conscientiousness; but being a matter of daily school work, in which there is ever presented to child and teacher prescribed results in memoriter and book work, all seems to stop with these. For instance, there seems to be little or no vital religion or religious earnestness among either children or adults. The pastors and teachers say this is not the fault of their systems of religious instruction and of state churches, but of the sad *indifferentism* of the people. Perhaps they are in part doubly mistaken, reversing cause and effect. Children attend divine service on Sabbath morning during school years, while on Sabbath afternoon, by national custom, they sport and play at will. After confirmation, which takes place at the close of the school course, they do not (especially the boys) attend church at all. It is rare, indeed, to see young men in church; older men are also habitually absent; and parents and children all alike make a half holiday on the promenade, at the concert, in the beer garden, at the ball, etc., on Sabbath afternoon. No Sunday schools, in the American sense, are known, and a week night prayer meeting or preaching is unheard of. Even church officials themselves largely frequent the theatres on Sabbath evening. It must also be admitted that this indifferentism is far more striking with the more cultivated Protestant than with the less liberally-educated Catholic.

Referring again to the school life, there is manifest among the children a lack of kindness, generosity, and nobleness, not to say *conscientiousness*, which seems both surprising and offensive to American and English children. Naturally native children will have their pick at foreigners. But this is not all. The German pupils seem strikingly unkind, overbearing, and inconsiderate to one another. It is a hard thing to say in print, but it is hard to avoid seeing that they are inveterate talebearers,—a habit which unfortunately teachers do not seem to

feel called upon to correct. A teacher has but to ask who is guilty of some little misdemeanor, and a score of hands fly up, while tongues are eager to tell. The scholars habitually use most aggravating and shameful names or terms toward each other, for which, hard as it seems again to say, many teachers must be held responsible; for no American community would for a day tolerate the vocabulary of disparaging, ill-bred, and aggravating terms which many of these teachers shower upon their pupils. Too frequently, also, punishment takes the shape of the keenest possible mortification, the teacher invoking upon a delinquent the ridicule of his fellows. Both teacher and pupil are hardened to an unfeelingness most damaging to both.

At the same time, German school children are not guilty of many peccadillos and graver tricks known in American schools; but this is partly because they are less inventive, largely because they are less daring, and much because of a sterner parental control, and not at all because of higher moral qualities or training. Again, German boys are not guilty of so much and so daring out-of-school mischief as Americans, but this again is to be accounted for as before, and by the fact of so strict and universal a police system. Without statistics I am prepared to admit that there may be less public misdemeanors here than in America; but it is certainly debatable whether this may not be accounted for as the last, with the further fact of a stricter administration of public justice. It is the thousand little acts of meanness, tyranny, cowardliness, ungallantry, etc., that fill American children with disgust at German schools—not that these things are unknown in America, but that here they are so offensively common. The same thing shows itself after childhood, in the unconscientiousness and ignobility of certain classes. There is a constant tendency to hold to the *law* and the *letter* at the expense of *conscience;* perhaps because everything here is the subject of law and fixed by ordinance, almost nothing being left to conscience and honor. It is the universal complaint of foreigners against the classes of Germans with whom strangers come most in contact, that no advantage is ever yielded and no favor shown. Unquestionably Americans are ceaselessly offended at the lack of equity and fair dealing they meet, and it is hard not to think the cause lies largely in the lack of conscience culture in the schools.

German children are habitually and, to American ears, shock-

ingly profane. Gott in Himmel! Herr Gott! Ach Gott! Leiber Jesu! etc., are the commonest ejaculations of the play-ground. To be sure everybody is guilty alike,—parents, teachers, and all. But one would think that religious training in the schools should aim to correct such a vice, which it certainly does not.

No thoughtful American would think of exchanging the American Sunday school and prayer meeting, and pulpit and home circle religious training, defective and limited as they are, for the elaborate system of religious instruction in German schools.

Carlsruhe, Sept., 1873. WM. H. YOUNG.

DEATH AND LIFE.

Last summer I spent a fortnight in my native town. It is one of those little townships among the mountains of western Massachusetts, which, after being almost abandoned by the farmers, are waking to a new life by the throngs of summer visitors from the cities. Some of these old towns are among the most exquisite realms of mountain scenery to be found in any country.

I was born and lived twenty years in this village, on the slope of a mountain sixteen hundred feet above Boston harbor, itself only the topmost billow of an ocean of hills rolling up from half a dozen surrounding valleys. The schools of the region were probably better then than to-day. Afterward I studied in academy and college in another of the loveliest spots in America, the Deerfield Meadows, and the hills overlooking the paradise of river and mountain, we call Northampton. In a general way, I knew there were sweet meadows and wooded uplands and a wall of mountains in the view from the college steps at Amherst; that old Deerfield was a superb avenue of elms a mile long, overlooked by charming hilltops; that Warwick was a sort of convention of forest-clothed summits, presided over by the bald head of Mt. Grace. I have a dim recollection of having constructed a map of Franklin county, in which the essential point of rivalry with my schoolmates was the arrangement of brilliant colors in the boundary lines of those queerly shaped old townships. Unless my memory fails,

I took a prize for eminence in geography in the old schoolhouse upon the common, and entered college with a head full of the names of states, cities, and the other furniture of the world as figured on the plane-surface Atlas that accompanied Father Morse's and Olney's geographies.

Ten years after leaving college I fell upon half a dozen volumes of Ritter and Guyot, and for the first time, seven years after I had tried my hand at showing my fellow sinners the geography of the better land, awoke one day, after an hour's sitting, to the fact that there is a science called Physical Geography. I remember but two or three mental experiences so sudden and profound. It came to me like a revelation, or like the first leaping forth of the mountain world above the vale of Chamouny from an all-enshrouding mist, that this planet has a creation of marvelous order and beauty, struck out at one sublime thought of the Creative Soul. So, through the last summer and autumn, in all my wanderings through what I used to call familiar ground, I have been engaged, for the first time, in the study of the geography of western Massachusetts, according to the natural method of teaching in every good normal school. It is a little shameful for a grown man, and a professional man at that, to confess that the first true picture of his native township came to him with his grey hairs, but I suspect there are plenty of "respectable" people in the same condition.

I have lately tried the experiment of testing the geographical knowledge of a variety of school children and "educated" young people in various parts of the country, and am pretty confident that not one school boy or girl in a hundred, carries away from our American school-rooms even so much as a correct picture of his native town, to say nothing of the state or region in which he lives. What we call the study of geography still remains, in the majority of our schoolhouses, a mere burdening the memory with a crowd of names, and a confusion of the eye and mind by a set of colored pictures. Such teaching is simply the slaughter of a noble science, and carries mental death in its wake. It fills the minds of our children with an intolerable disgust of a study which, rightly handled, would be more enchanting to little children than the procession of Mr. Barnum's "Great Moral Show."

No teacher in common schools can make a thorough geographer of any child. But any teacher, properly trained in living methods of instruction, can make the sleepiest youngster ap-

prehend what geography really is. Dr. Sears tells a story of questioning the class in geography in Hull, a little colony on the Atlantic beach, in the following style: "My boy, at the head of the class, what is geography?" "A description of the earth", roars out the red-headed incipient Webster. "Well, my boy, did you ever see the earth?" Awful pause! Nobody ventures that step in the dark. "Has anybody in this class seen the earth?" One little blue-eyed maiden, near the foot, holds up her hand. "Well, my little girl, did *you* ever see the earth?" "Yes; Papa took me up to Berkshire last summer, and I saw it there." I am afraid a great multitude of older children than the delegation from Hull, have never "seen the earth", or, at best, caught a faint glimpse of its coat-tails vanishing around some corner in the White Mountains, the Alleghanies, or the Alps.

Let us never forget that all we can do in the public school is to open the road to half a dozen unknown lands of knowledge and life. But the teacher who has opened the tiniest footpath of real, living knowledge into any realm of God's creation, has put into the hand of the feeblest child the golden key that unlocks the doors of eternal life.

Springfield, Mass. A. D. Mayo.

MENTAL ARITHMETICS A HUMBUG.

Strictly speaking all arithmetic is mental. Pencils and pens have no power to reason or to calculate. Slates, blackboards, blackwalls, and paper are useful as aids to the memory. It should be distinctly observed that the title of this article is not "mental arithmetic a humbug", but "Mental Arithmetics a Humbug." I have adopted this sensational heading for the purpose of inducing a greater number of experienced educators to read the thoughts which follow, and which will be found to be in opposition to the educational fashion of the last twenty or thirty years as seen in the best schools of the country.

I have before me a work in three volumes, in all 737 pages, large duodecimo, entitled "Pestalozzis Anschauugslehre der Zahlenverhältnisse", published in Switzerland in 1803–4. The English of the title is "Pestalozzi's Intuition-instruction of the Proportions", or, more tersely, Pestalozzi's Mental Arithmetic. There is not in the whole work a single example in which so-

called concrete numbers are used. A dryer collection of examples for children could hardly be selected. The first volume begins as follows:

TABLE OF THE UNITS.

FIRST EXERCISE.—FIRST RANK.

1 time 1; 2 times 1; 3 times 1; 4 times 1; 5 times 1; 6 times 1; 7 times 1; 8 times 1; 9 times 1; 10 times 1.

The last of volume first closes with—

100 is 10 times 10; 90 is 9 times 10. 10 times 10 is 10 times the 9th part of 9 times 10.

The last question in the second volume is,

How many wholes are there [German, "*gives* it"], if the 10th part of 14 wholes are taken 9 times? Answer. If the 10th part of 14 wholes are taken 9 times, there are [Ger., "*so gives it*"] 12 wholes and 6 tenths.

The last question in the third volume is,

To what number of wholes is the difference between 3 wholes and $\frac{1}{4}$ and 2 wholes and $\frac{1}{3}$, as 1 whole and $\frac{1}{7}$ to 1 whole and $\frac{2}{3}$? Answer. The difference between 3 wholes and $\frac{1}{4}$ and 2 wholes and $\frac{1}{3}$ is to 1 whole and $\frac{5}{7\frac{1}{2}}$, as 1 whole and $\frac{1}{7}$ is to 1 whole and $\frac{2}{3}$.

FIRST MODE OF SOLUTION.

1 whole and $\frac{1}{7}$ are $\frac{1}{7}^0$; 1 whole and $\frac{2}{3}$ are $\frac{5}{3}$; in order to determine the relation between 7ths and 3ds, I must resolve both into 21sts: $\frac{1}{7}^0$ are $\frac{3}{2}\frac{0}{1}$; $\frac{5}{3}$ are $\frac{3}{2}\frac{5}{1}$; $\frac{3}{2}\frac{5}{1}$ are 7 times $\frac{5}{2}_1$; $\frac{3}{2}\frac{0}{1}$ are 6 times $\frac{5}{2}_1$; 7 times $\frac{5}{2}_1$ are 7 times the 6th part of 6 times $\frac{5}{2}_1$; now $\frac{3}{2}\frac{0}{1}$ as the difference between 3 wholes and $\frac{1}{4}$ and 2 wholes and $\frac{1}{3}$ is to a number, which is equal to 7 times the 6th part of this difference. I must also seek the difference between 3 wholes and $\frac{1}{4}$ and 2 wholes and $\frac{1}{3}$, and take 7 times the 6th part of it. 3 wholes and $\frac{1}{4}$ are $\frac{1}{4}^3$; 2 wholes and $\frac{1}{3}$ are $\frac{7}{3}$; $\frac{1}{4}$ is $\frac{3}{1\frac{1}{2}}$; $\frac{1}{4}^3$ are $\frac{1}{1}\frac{2}{2}$; $\frac{7}{3}$ are $\frac{1}{1}\frac{4}{2}$; the difference between $\frac{1}{1}\frac{2}{2}$ and $\frac{1}{1}\frac{4}{2}$ is $\frac{1}{1}\frac{1}{2}$; the 6th part of $\frac{1}{1}\frac{1}{2}$ is $\frac{1}{1}\frac{1}{2}$; 7 times the 6th part of $\frac{1}{1}\frac{1}{2}$ is $\frac{7}{7}\frac{7}{2}$; $\frac{7}{7}\frac{7}{2}$ are 1 whole and $\frac{5}{7\frac{1}{2}}$.

SECOND MODE OF SOLUTION.

1 whole and $\frac{1}{7}$ are $\frac{1}{7}^0$; 1 whole and $\frac{2}{3}$ are $\frac{5}{3}$; in order to find the relation between 7ths and 3ds, I must resolve both into 21sts. $\frac{1}{7}^0$ are $\frac{3}{2}\frac{0}{1}$; $\frac{5}{3}$ are $\frac{3}{2}\frac{5}{1}$; $\frac{3}{2}\frac{0}{1}$ are 6 times $\frac{5}{2}_1$; $\frac{3}{2}\frac{5}{1}$ are 7 times $\frac{5}{2}_1$; 6 times $\frac{5}{2}_1$ are 6 times the 7th part of 7 times $\frac{5}{2}_1$; now $\frac{3}{2}\frac{0}{1}$ are to a number of which $\frac{3}{2}\frac{0}{1}$ are 6 times the 7th part, as the difference between 3 wholes and $\frac{1}{4}$ and 2 wholes and $\frac{1}{3}$ is to a number, of which this difference is 6 times the 7th part. I must also seek and determine the difference between 3 wholes and $\frac{1}{4}$ and 2 wholes and $\frac{1}{3}$; what results from this number determines 6 times the 7th part. 3 wholes and $\frac{1}{4}$ are $\frac{1}{4}^3$; 2 wholes and $\frac{1}{3}$ are $\frac{7}{3}$; $\frac{1}{4}$ is $\frac{3}{1\frac{1}{2}}$; $\frac{1}{4}^3$ are 13 times $\frac{3}{1\frac{1}{2}}$; 13 times $\frac{3}{1\frac{1}{2}}$ are $\frac{3}{1}\frac{9}{2}$; $\frac{7}{3}$ are $\frac{1}{1}\frac{4}{2}$; the difference between $\frac{3}{1}\frac{9}{2}$ and $\frac{1}{1}\frac{4}{2}$ is $\frac{1}{1}\frac{1}{2}$; $\frac{1}{1}\frac{1}{2}$ are 6 times $\frac{1}{1}\frac{1}{2}$; 6 times $\frac{7}{7}\frac{7}{2}$ are 6 times the 7th part of 7 times $\frac{1}{1}\frac{1}{2}$; 7 times $\frac{1}{1}\frac{1}{2}$ are $\frac{7}{7}\frac{7}{2}$ or 1 whole and $\frac{5}{7\frac{1}{2}}$.

The first question in Colburn's Intellectual Arithmetic is,

"How many thumbs have you on your right hand?" and the last (on p. 140, of the edition of 1828, published at Hallowell, Me., and in Boston), "A man being asked how many sheep he had, answered, that if he had as many more, ½ as many more, and 2½ sheep, he should have 100. How many had he?"

The first question in Stoddard's Intellectual Arithmetic is, "2 and 1 how many?" and the last (p. 163, 20th edition, issued more than twenty years ago), "The interest of the snm of ½ of A's, and ⅔ of B's fortune, for a *certain* time, at 2 per cent, was to *this sum* as 9 to 250. And the amount of *this interest* for 25 times as long, at 10 times as great a per cent, was $180. What was each of their fortunes, providing A's fortune was to B's as 1 to 3? And how long was the first on interest?"

It will be seen that mental arithmetics begin in a manner so simple that they indicate that they are intended for beginners. Colburn's Intellectual Arithmetic does not introduce figures to represent numbers before the 50th page. There is no indication how the book is to be used, or that a pupil should stop at any part of the book to learn the processes of addition, subtraction, multiplication, and division, as given in written arithmetic so called. It would be interesting to know how long it would take a pupil in a graded school to master Colburn's Intellectual Arithmetic, beginning before he had been taught the use of figures, and finishing before he had learned the writing of numbers farther than given in the book, or before he had learned the processes of written arithmetic.

I believe it was Mr. David Page that pronounced Colburn's Intellectual Arithmetic "the only perfect text-book ever written." It is to be regretted that Mr. Page did not prove his assertion by showing exactly where in an arithmetical course the book should be used, and its perfect fitness for the place assigned. There is nothing in the works on mental arithmetic, so called, to show that the lessons are to be studied otherwise than consecutively. Warren Colburn did not in his original preface suggest any other plan. Geo. B. Emerson, in his introduction to the new edition of Colburn's First Lessons, 1863, says: "It can be well taught only by a teacher who perfectly understands it, and who knows how to teach. Such a teacher will not allow the lesson to be previously studied by the pupil." * * * "By allowing the class to study the lesson beforehand, not only is much time lost, but the exercise is turned into a poor sort of mechanical process not much better than

common ciphering. Its mental character ceases almost entirely."

Here is a thought worthy of the examination of all teachers who use works on mental arithmetic. Emerson did not fail to see that the advantages to be derived from such a book as Colburn's are not restricted to beginners. He closes his introduction with these statements :—

"This book ought not to be used with beginners only. Its effect upon those far advanced is even better and more striking. It might be continued, with the greatest advantage, till the end of every course of instruction, and, if so continued, would have the constant effect of sharpening the perception and varying the ability of analysis, of giving perfect readiness in the mental solution of all common problems, and of fixing the habit of clearness, quickness, and accuracy in the process of exact reasoning."

I believe that no more mental arithmetics should be published, but that they should be injected into the so-called written arithmetics. Mental arithmetics as generally taught to young pupils are books of routine, as are written arithmetics as generally taught to older pupils. A proper fusion is the great arithmetical desideratum.

Salem, Ohio. W. D. HENKLE.

WRITING IN OUR SCHOOLS.

The subject of writing is at present exciting much thought among teachers. All methods of teaching this branch, except the employing of professional teachers, have failed, and this is not practical only in a few schools, as the expense is too great. Hence a good writer whose only instructions were obtained in the schools, can hardly be found.

The only method that will ever reach the wants of our schools, is for the teacher to be qualified to teach this branch, and to give his personal attention to its development as strictly as he does now to arithmetic and grammar; then will it be a success in the schools, and by no other method can it be. The successful teacher of writing, like the successful teacher of other branches, must be qualified to teach it, and the joining

of trained thought with personal interest will make success certain.

The time was when any one was thought capable of teaching writing. That day is past, for educated men consider penmanship a science; at least those who study it most do, and authors treat it as such. They have greatly improved and simplified the forms of the letters, and they have taken great pains in preparing series of copy-books to meet the wants of the learner, until one would suppose that the use of these books would certainly make writing a success; yet good writers are not the result, which shows plainly that nothing in the shape of helps can take the place of the qualified teacher. If those who are authorized to examine teachers would require applicants to pass an examination in penmanship at the blackboard, it would be but a few years before teachers would be as thoroughly qualified in it as in any other study, and find equal pleasure in teaching it.

It may be asked, what are the requirements of a qualified teacher of writing? One of the requirements, and one that covers nearly the whole ground, is the ability to "chalk and talk." That is, the ability to put upon the blackboard a system of correct forms, and to explain the same according to the principles of some generally used system of writing. It will require but little time to gain this knowledge and practice; not more than six weeks at the most, and when the whole time is given to it under a competent instructor, not over two weeks. No teacher who desires to meet the wants of the schools will complain if the school examiners do require this of him.

When a teacher is thus prepared, he feels strong before his pupils, and will not be ashamed when the subject of writing is being discussed, and he will be able to meet the wants of his pupils with regard to this branch in a business education. It is hoped that the examiners of teachers will give this subject the thought that its importance demands, and that steps will be taken to test its value to our schools. It seems reasonable that the teacher should be qualified to teach the studies that he is required to teach.

The State Normal School of Michigan has taken the proper stand on the subject, in requiring its graduates to be able to put upon the blackboard the alphabets according to the principles of some system of penmanship, and to explain the same;

also to teach the method of holding the pen, the position at the desk, and movement. When other normal schools and institutes take a like position, the success of this subject will be a fixed fact, and the day when good business writers will leave our schools, will be near.

Ypsilanti, Mich. W. W.

PHYSICAL GEOGRAPHY.

A school boy, especially if he live in the country, may, in his walks to and from school, lay the foundations of three cognate departments of valuable knowledge, viz: Geography, Physical Geography, and Geology. He begins to map out in his mind the conditions of the surface of the earth about him; its fields, streams, hills, groves, products, &c.; and to form definite ideas of the people he sees, distinguishing them as white or black, farmers or mechanics, &c., &c. The same kind of knowledge, if sufficiently extended, will give him the substance of Geography. Again, he may begin to connect the facts and phenomena he has observed with causes, and to group all into some system. He soon learns to distinguish between the effects of rain as an eroding agent, wearing away the road on the hillside, and the effects of rain as a fertilizing power in corn-field and meadow. He finds the sunshine and heat favorable to the corn, while the pretty ferns hide away in the dark damp glen or in the shade of the moss-grown rocks. If he live by the sea, he learns many a lesson of tide and wind and wave. This is his introduction to the study of Physical Geography. If, again, he find in his path some old rock, with strange impression of shell or plant upon it, he will continue his questionings, and, beginning in wonder, may end with much truth. He travels backward in thought to a remote past, and finds proof that the same laws of physical geography, dynamic and vital, which he observes in play on the earth's surface around him, were in force building and destroying then as now. If with hatchet or chisel he lays open a coal-plant in its slaty herbarium, his delighted eye gazes on stalk and leaf across an abyss of time as vast as that of the space which separates him from the sun or the planets. Thus the lad begins the study of Geology.

These three studies constitute a unit, for one passes by im-

perceptible gradation from simple surface geography, through physical geography to geology. The first gives us the surface of the earth and the nations which occupy it. The second reveals the mighty sweep and interaction of the forces, inanimate and animate, which are constantly at work in and upon the earth, while in geology, the third, we follow back the workings of the same forces, from era to era, until the record becomes dim and even the imagination is wearied. Surface geography is merely the starting point in the series, and no system of common-school education is perfect—none is, indeed, respectable, which ends where it should merely begin. It is only when we reach the department of physical geography that the mind is fairly set to work, wrestling with and mastering the grand problems which everywhere surround us in the material world. The simplest fact is found to be correlated with other facts. An effect in turn becomes a cause. The mountain condenses the moisture of the air, and this moisture, in the form of rain and rivulet and torrent, washes away the mountain itself, and fills up the valleys, or transports sediments to the distant ocean.

In addition to the practical value of its facts, and their connection with the business of life, physical geography possesses a claim upon the attention of the friends of education from the interest it awakens and the stimulus it gives to the mind. Nothing, indeed, can be more interesting to the boy or man than the facts of this great science. It matters not where one begins his observation, in the valley or on the hill, by the mountain or by the sea, many of these facts will press themselves upon his attention. Every fact lies upon the hither edge of a plane of thought and study. Take that wonderful condensation of facts and principles contained in the Physical Geography of Prof. Guyot,—one of the noblest contributions to school literature ever made,—and we see how vast the range is. Here we have the Earth considered as a whole in its relations to the solar system, its form and volume, its character as a stupendous magnet, its internal temperature giving rise to volcanoes and earthquakes, its continents with classified forms of continental relief, its rivers and lakes, its oceans with their tides and currents, its atmospheric phenomena in winds and rains and storms, and, crowning all this, the story of life in all its myriad vegetable and animal forms, not only in its distribution, but in its marvelous relations to the physical conditions under which it appears and is fostered, with man the

highest and noblest of all God's creation at its head, to whom, either to his body or soul, all below is tributary.

In this vast and harmonious system we may commence our investigations with a grain of sand, a rain-drop, or a leaf, and pass by logical sequence of scientific research through the whole series of phenomena and causes; or, beginning with man, we may descend through the whole range of the organic and inorganic realms until,—especially if we accept the nebular hypothesis,—we lose ourselves in the depths of those grand coördinates of matter, time and space.

No study tends more to stimulate thought and inquiry than this of Physical Geography. Let a pupil in one of our schools be taught such a text-book as Guyot's, and his mind will be stirred to a life-long wakefulness in regard to all the outward facts and phenomena of nature. Indeed, his whole life will be more intelligent and valuable. He will discard the many popular superstitions, such as those which attribute all sorts of effects to the moon and stars. Should he become a farmer, he will consult the true laws of husbandry, and care little in his planting and reaping whether the moon is in the old or the new, nor fear to bring his fattened pigs to the slaughter lest the sign of the moon be wrong and cause the pork to "shrink in the pot." Horses' shoes will be reserved for the horses, and not be nailed as protecting charms over door-ways and on the bows of boats. There will be gradually formed in the mind of such a student an inexorable demand for some real connection between cause and effect. He, indeed, becomes more logical and exact in all his reasoning, and he loses interest in the irrelevant and scattering methods of argumentation which enter so largely into all the staple of common conversation.

I think enough has already been said to prove that a science like this, with so many of its facts within the easy range of common observation, and, at the same time, illustrating so many of the great laws of the universe, should hold a very prominent place in any system of education for the masses of men. But it must be well taught; not in that listless way in which too many teach ordinary geography, as something so foreign to the child's personal range of observation as to leave the same impression of remoteness and dreamy distance that attends his conceptions of the stars and constellations. The teacher must have a peculiar fitness for his task. He must himself have vivid conceptions of nature, in all her moods and

aspects, if he would hope to aid his pupils. He must not only know well his text-book, but must contribute much from his own personal observations, and from a pretty wide range of reading. His travels should store his mind with facts. We all know that what a teacher himself has seen, he can describe with more life and enthusiasm, and with more effect, than if he had merely obtained his knowledge from books. Agassiz read is very instructive; but Agassiz heard and seen—bringing to the lecture or conversation all the wealth of his personal observation, and the glow of his personal enthusiasm—is something quite different. That rare enthusiasm of his has made him the first teacher of science of modern times, if we may judge from the wonderful stimulus he has given to scientific study in the New World, and scarcely less in the Old.

The interests of education demand such teachers in all our schools and colleges. Men who can kindle a desire for knowledge, and satisfy it. If our teachers of the natural sciences could all spend a summer vacation with Agassiz, Guyot, and others, on Penekese island, and learn to use their eyes, and to study and think, they would not only be wiser, but would be inspired with new life and power. As it is now, too many are contented with the simple knowledge of a text-book. Such an one may be compared to an almost stagnant pool, with neither inlet nor outlet. He should be like the living stream—always receiving, always giving.

Lancaster, Ohio. E. B. ANDREWS.

HINTS ON VENTILATION.

The cool days of autumn have come, when the doors and windows of schoolrooms are closed, and fires are kept up during the day. From thirty to forty children, on an average, with the teacher, are shut up in these rooms for six hours daily, breathing over and over the exhaled breath of each other, causing headache, nervousness, and restlessness. Lessons are missed, feet move noisily, slates fall, and sometimes a general disorder ensues. Things go wrong all day, and, at night, each one goes home feeling generally dissatisfied with himself; and why? *Because all day the room has been full of impure air.*

It rests with teachers, and is one of their most serious duties,

to see that this does *not* happen; that the impure air is let out, and the pure air let in. The future as well as the present health of their pupils depend on their action in this matter.

"But," a teacher says, "the air in my schoolroom seems fresh and pure enough." Yes, and because you are in the room all the time. Step out into the fresh air, and then come back, and the foul air may cause you to stagger. Your first impulse will probably be to open wide the windows without regard to the position of the children, thus making them liable to take cold.

When I thus find the air in my schoolroom impure, my plan is to open a window in that part of the room, where the cold air will not strike the children too suddenly. I not only step out into the fresh air, once in a while, to test the condition of the air in my schoolroom, but when any one comes in, I ask, "How does the air of the room seem to you?" and I act according to their answer.

A very good way to ventilate a schoolroom, is to have the pupils form a line and march, commencing with a walk, and going faster and faster, as you open the windows one after another. Care should be taken not to have the pupils march so fast as to exhaust them. They should return to a walk slowly, so as not to check the perspiration caused by the quick march, the windows meantime being gradually closed. You will thus have a room full of pure air, and animated children. This plan works well, especially on rainy days when the pupils do not wish to go out doors at recess.

If teachers would "read up" on the subjects of ventilation and the laws of health—and much information is found in every school physiology—they would pay more attention to this important, but too often neglected duty.

Cincinnati, Ohio, Oct. '73. RUTH C. WAINWRIGHT.

—— A special worth is often attached to study far into the night. The student's "mid-night lamp" always claims for itself a certain veneration. But this is vanity. In the first place, it is injurious to contradict Nature by working through the night which she has ordained for sleep; secondly, the question is not as to the number of hours spent in work and their position in the twenty-four, but *as to the quality of the work.*—DR. CARL ROSENKRANZ.

EDITORIAL DEPARTMENT.

—— We call special attention to the opening article in this number, giving the origin, organization, character, and results of religious instruction in the schools of Germany. The facts so clearly stated have an evident and important bearing on the question of religious instruction in the schools of this country. They indicate that the chief purpose of this elaborate system of instruction, as Prof. Young properly calls it, is to ground children in the doctrines and rites of the several "confessions"—to make them Lutherans, Catholics, or Jews. Moral results are of secondary importance. On the contrary, whatever of religious teaching is found in American schools, aims at moral training. This is its great purpose, and hence its non-sectarian character. It uses the motives and sanctions of religion to train the moral sense—to give the conscience authority in the life, but it does not seek to make the pupil a Protestant, or a Catholic, or a Jew. It is plain that the objections to the German system of sectarian instruction can not be urged against non-sectarian religious teaching and influence, employed to give efficacy to moral training. In his next paper, Prof. Young will compare German and American schools.

Mr. Henkle's paper on mental arithmetic was written several years ago, while he was State Commissioner of Common Schools, and it was recently found in one of the drawers in the Commissioner's office, where it was put to await completion. It is published in its incomplete condition with the author's consent. The article not only expresses the opinion of one of the very best mathematicians in the country, but also, as we believe, of the great majority of thoughtful and progressive teachers. The experiment of completing a treatise on mental arithmetic before beginning the study of written arithmetic, has been faithfully tried in too many schools, and uniformly with unsatisfactory results. The logical analysis of many of the problems in ordinary mental arithmetics, is entirely beyond the capacity of young children, and persistent drilling therein is a mental injury. The other expedient of giving two recitations daily to arithmetic—one to mental and the other to written—demands more time than can be given to this branch, and the practice has been abandoned in most graded schools. The great desideratum is the complete union of mental and written exercises, by making the former preparatory to the latter, and this has been done in two series of arithmetics published since Mr. Henkle's article was written.

—— A rule of the Board of Education of Cincinnati ordains that "moral instruction shall be given in all the grades in such manner as

shall be prescribed by the principals." This puts the entire responsibility of moral instruction in the schools upon the principals, and they are earnestly considering the subject with a view of adopting an efficient system. At a meeting of the principals' association, held Nov. 1st, a committee presented an elaborate report, which, after a spirited discussion, was laid over for future consideration. The report states that "in not more than five of all the schools is there anything like regular moral instruction given", and it also appears that the time allotted by the Board for such instruction "is taken by many teachers for drilling on per cent lessons. These statements indicate a lamentable neglect of moral training, for which the principals and teachers are alone responsible, as the report frankly admits. We are much surprised by the statements made respecting the manner in which the Bible was formerly read in some of the schools. Many of the other facts and incidents given show a pressing need of faithful moral instruction, and we rejoice that the principals recognize this necessity and propose to meet it.

—— WE do not envy the Cincinnati principals the task of devising a system of moral training from which the Bible and religion must be entirely excluded, to conform to the regulation of the Board, sanctioned by the late decision of the Supreme Court. It will be a strange condition of things when Christian teachers are obliged to enforce moral obligation by citing the precepts of heathen sages. Will the sayings of Confucius and Pythagoras cause the young to tremble with fear when tempted to do wrong? Will the injunctions of the Koran and Vedas make the consciences of our children regal? But this last inquiry may not be pertinent, as these injunctions trench on the domain of "religion", which must be excluded from the Cincinnati schools. It is said of the moral precepts of Confucius that they were wanting in vitality and power because "they had no root in any definite religious faith." The sage closed his career bitterly disappointed that his teachings and efforts had accomplished so little in exalting the standard of public and private morality. But may not even the precepts of Confucius be vitalized by an earnest Christian teacher? This question touches the rock. *The* TEACHER *is the vital element in all moral training.* No "course" of moral instruction, pagan or Christian, can make children moral unless such instruction is translated in the life of the teacher. Take courage, good friends of Cincinnati; neither the rules of boards nor the decisions of courts can prevent religion from entering the schools *in the person of the teacher.*

A LATE number of *The Educationist* contains a paper by W. D. Henkle, of Salem, Ohio, on the formation of nouns ending in *ist*, in which it is clearly shown that the word *educationist* is as legitimate etymologically as elocutionist, geologist, abolitionist, and scores of other similar words in common use. Mr. Henkle thinks that if the new words *educator* and *educationist* both survive, "the former will no doubt be used to mean

one who actually engages in the work of education, and the latter for one who encourages or promotes education", and this is precisely the distinction authorized by both Webster and Worcester. The term *educator* is really synonymous with *teacher*, and it does not seem proper to use it to denote one who is versed in, or who advocates or promotes education, but who is not a teacher. We would call Horace Mann or Dr. Barnard an *educationist;* and the only objection to the term is its lack of strength, owing possibly to its non-active meaning. But no other term is as appropriate. The term *educator* seems specially applicable to a teacher who is versed in the principles and methods of education, and who has also attained some eminence in the profession. This use of the word is more and more noticeable, and we hope it may become general.

—— The Jubilee Singers have had a noble reception in Great Britain, and they will doubtless return to this country with more than the desired $30,000, needed to complete "Jubilee Hall", the first of the new buildings of Fisk University. They have sung to delighted audiences in all parts of the country, and the leading papers are enthusiastic in their praise. A noticeable feature in their tour is the social recognition which they have received. Lords, Earls, and other dignitaries, have honored them with invitations to sing at their residences, with receptions, etc. When they sang at the residence of Mr. Gladstone, the Prince and Princess of Wales and other members of the Royal Family were present, and expressed their warmest appreciation of the singing. They have spent the past three months in Scotland with increasing success. In Edinburgh they dined with the Lord Provost at Royal Terrace, with a select party of invited guests, with whom they mixed freely. *The Scotsman* states that "the singers without exception quite captivated the other ladies and gentlemen by the good taste, polite manners, and general intelligence displayed." The bold attempt to raise $70,000 to purchase grounds and erect a building for a university was never before made by a band of students.

—— We are glad to notice an increasing recognition of the necessity of an authorized course of study for ungraded schools, for the guidance of school officers and teachers. California recently took a bold step to meet this want, and now the State Superintendent of Kansas submits and recommends a plan for grading country schools, with a complete course of study. In the preface to this course, Supt. McCarty states that the practicability of the scheme is "no longer a question to be decided by experiment", and he claims for Kansas the honor of inaugurating a plan which has since been extensively followed with gratifying results in a number of states. We are left in ignorance of what the "plan" referred to may be, as we are not aware of the extensive adoption of any plan for grading country schools, but we are much gratified to be assured that the feasibility of the plan, whatever it may be, is clearly set-

tled. This is a very important fact. We have only had time to glance over the course of study recommended. It seems to be carefully prepared, and its general adoption by school officers and teachers in Kansas can but result in a great improvement of the district schools.

—— As we lay down the cheering document above noticed, we take up a letter from a perplexed country teacher who earnestly asks what he can do "when parents will not permit their children to do any thing in school." He gives a sad but familiar account of the waste of time and neglect of opportunity resulting from this interference of parents with the work of the teacher. He wishes to know what are the duties, according to law, of township boards of education in regard to studies and text-books. The provision of the law is as follows: "Each board of education *shall* determine the studies to be pursued and the text-books to be used in the schools under their control, and no text-books shall be changed within three years after its adoption without the consent of three-fourths of the members of the board of education, given at a regular meeting." If we understand this provision, it not only makes it the *imperative duty* of boards to determine the studies to be pursued in the schools, but it also gives them power to prescribe the studies *to be pursued by each pupil.* The exercise of this power is not enjoined. Boards may or may not adopt courses of study and prescribe the studies of each pupil. Such action, if wisely taken, would result in great progress in our country schools, and it is to be hoped that township boards may at least prescribe a general course for the guidance of teachers and parents.

——Prof. Mills, of Marietta College, contributed to the last volume of the *Olio* two valuable articles on the advantages of small colleges. Among the intellectual advantages, he specifies the necessity of a more faithful preparation of every lesson, due to the fact that the students are more frequently called on to recite than in larger classes. The larger the class the greater the number of students omitted in the recitation, and frequent omissions are a strong temptation to the neglect of study. There is a similar advantage in the literary societies, and in elocutionary and rhetorical exercises. The number of members being smaller than in larger colleges, each must take part more frequently, with consequent benefit. But the chief intellectual advantage is the fact that the students in smaller colleges are more under the instruction of the professors. In the larger institutions no small part of the actual teaching is done by tutors. It is a great thing for a young student to come into personal contact with a superior mind, and the longer this contact the better. The moral advantages of small colleges are very evident. There is less temptation and more restraint. But few rich and self-indulgent students attend small colleges, and these find little encouragement in vicious courses. The instructors have an intimate acquaintance with the character and tendencies of each student, and their oversight

is personal and helpful. It is so much the fashion to sneer at "one-horse colleges," that we call attention to this earnest plea in their behalf. It is the quality of the work done by a college, and not the number of its students, that determines its character.

——The very brief article in this number on ventilation contains several valuable suggestions. It is the imperative duty of teachers to give special and constant attention to the temperature and ventilation of their schoolrooms. A small thermometer will indicate the former, but, having no such convenient and reliable test for the latter, the teacher needs to be very watchful. But when a teacher is aware that the air in a schoolroom is too impure to breathe, it is not always easy to secure needed ventilation. The opening of the windows may pour a stream of cold air on pupils sitting near, causing them to take cold, and the temperature of the room may be lowered to an uncomfortable degree. The health of pupils is often seriously injured by frequent exposures to draughts of cold air occasioned by open windows. Our correspondent's plan of avoiding this difficulty is worthy of trial. If a schoolroom is thus ventilated every hour, or twice each half-day, the pupils will not suffer much from impure air. It will usually be found feasible to open one or two windows a little *at the top*, those nearest the stove and farthest from the pupils being generally selected. The direction of the wind should also be considered. What is needed is the bringing of pure warmed air into our schoolrooms and the taking of the impure air out, and this can never be done by opened windows, or cold ventilating flues.

—— In a recent letter to Dr. Fuller Walker, of New York, President Eliot, of Harvard College, expresses the opinion that our public schools are depreciating and that they serve their purposes less well than they did thirty years ago. "One reason", he adds, "is the irruption of foreigners; another, the cheapening of the schools by employing superintendents rather than teachers; another is the religious difficulty; another is the substitution of women for men to an enormous extent, the result being that we have fewer experienced teachers than formerly, because the women get married and leave the business of teaching for a better one." It is the opinion of those who have had wider experience and observation in public education than President Eliot, that the elementary schools of this country have greatly improved in the last thirty years, and this improvement is most marked in cities and villages where the causes specified by him are most manifest. Some of these causes may effect the schools injuriously, but they are more than offset by other causes which might be named. We fear that the learned President of Harvard sometimes sees his facts in the light of his theories, as he did when he visited Oberlin. The reasons assigned ought in his opinion to cause the schools to depreciate, and so he confidently asserts that this is true. In what respects are the public schools depreciating?

THE ANTI-ROD EXPERIMENT IN NEW YORK.

The committee on teachers of the board of education of New York City recently presented a report giving *sixteen* reasons in favor of reinvesting the principals with the right of using corporal punishment in the government of boys. The committee states that this recommendation is made after a careful examination into the actual working of the experiment of "exclusive moral suasion," which has been tried for three years. Twenty-five principals, selected in part by lot, and in part from the more experienced teachers, were before the committee, and, although several of them had voluntarily dispensed with corporal punishment before its abolition by the board, they were unanimous in the opinion that the right to inflict corporal punishment, under proper restrictions, on willfully disobedient and incorrigible boys, should be restored to the principals, such restoration being "indispensable to the proper discipline and general progress of the schools." The failure of the anti-rod experiment is seen in an increasing lack of prompt obedience, in more frequent insubordination, in greatly increased disrespect and insolent behaviour, in more frequent truancy, in greatly increased defiance of parental authority, "especially in cases of children of widowed mothers", in more frequent neglect of studies, in manifestly increased juvenile lawlessness and crime, in the loss of many bad children by expulsion and withdrawal, in the lowering of the standard of discipline by teachers, in their use of questionable expedients, etc., etc.

The board has taken the report with these "ugly facts in the experience of the teachers," as the *Times* calls them, under consideration, and meanwhile a sharp controversy is waged in the papers with an indication that public sentiment favors the committee's recommendation.

We have long believed that while it may be well for boards of education to regulate and even restrict the use of corporal punishment, it is not best to prohibit entirely any resort to it. Such prohibition increases the difficulty of governing by mild measures. The very fact that the rod may be used, if necessary, makes it easier, as experience shows, to govern by other means. Corporal punishment can only be successfully banished from the schools by the teachers. This is shown by the experiment in Chicago, Cleveland, and other cities, where the teachers, with the right to use the rod, have made a voluntary and united effort to dispense with it. The teachers of Chicago reduced the number of cases of corporal punishment in 1870–71 to one for each two thousand pupils in attendance, and, at the beginning of the last school year, they united in an effort to discard it entirely. Not a case of its use has since occurred, and the order of the schools is reported in the main as good as ever before. The patience of some of the teachers has been sorely tried by a few incorrigible pupils, and there has been a considerable increase in the number of suspensions. The number of cases of corporal punishment in the Cleveland schools has been reduced from year to year by the voluntary efforts of the teachers until few cases now occur.

As a rule the rod is seldom used except when it will obviate the necessity of expulsion.

Another objection to the entire prohibition of corporal punishment is the fact that there are cases in every system of schools when necessary obedience can only be secured by a resort either to the rod or to suspension, and in many cases suspension should be the *last* resort. It is bad policy, to say the least, to suspend a small boy who is not under proper parental control. It is far better for such a boy to be whipped into obedience than to be sent adrift into the streets. When there is parental control, suspension may bring the authority of the parent to the aid of the teacher, and the result may be salutary. In too many cases, however, the interference of the parent only increases the difficulty.

It is no answer to this position to assert that there are teachers who govern their schools efficiently without resorting to either corporal punishment or suspension. We are glad to believe that there are many such teachers, but, unfortunately, they are not sufficiently numerous to supply the schools. Horace Mann once said that if the angels of Heaven would come down and engage in the work, they could govern any school in Massachusetts without striking a blow. The difficulty is *the angels do not come down*, and there are very few teachers that even approach the angelic standard. There are too many teachers who can only maintain their authority in school by occasionally supplementing their personal weakness by a resort to force. It is idle to say that such teachers should never be employed. They are in the schools and they will be there for some years to come, and this fact must be considered in legislating on the subject of discipline.

While we do not favor the entire prohibition of corporal punishment by school boards, we would encourage every teacher to aim to govern his school without any reliance on the rod. Such an effort will greatly reduce the number of cases of its use and in nine cases in ten when a resort to it seems necessary, other measures will prove much better.

CLOSE OF THE THIRD VOLUME.

This number closes the third volume of the NATIONAL TEACHER, a volume containing **516** pages, exclusive of advertisements. This gives an average of **43** *pages of reading matter monthly.* A glance at the table of contents will show that these pages have been filled with articles on a great number and variety of topics of practical interest. The contributors' pages have been largely occupied by the ablest and most acceptable educational writers in the country.

The fourth volume will begin with the January number, and the statement that it is our intention *to make it superior in practical value to its predecessor*, is the only announcement that seems necessary. Will not every friend of the TEACHER assist in increasing its circulation? No educational journal can depend on its merits to secure subscriptions.

EDUCATIONAL INTELLIGENCE.

—— When notified that a subscriber has failed to receive any number of this journal due him, we always remail it. Applications for missing numbers of the closing volume should be made at once.

—— We will send the December number free to all new subscribers for 1874 whose subscriptions are received before December 20th, 1873. We can still supply back numbers from October or July, and a few sets from January last. Single subscriptions may be safely remitted by mail in currency.

—— The Indiana Teachers' Association meets in Indianapolis, Dec. 30th and 31st. Dr. Richard Edwards, of Illinois, will give one of the addresses.

—— Union College, N. Y., and the Indiana Female College, at Greencastle, Ind., have each received a donation of $100,000 with a request, in each case, that the name of the donor be not made public at present.

—— The handsome new building for the Normal College of New York City was formally dedicated on the 27th of October. It occupies one entire block of ground and will accommodate 1500 students. It is second to no building of the kind in the world.

—— Prof. Arnold Guyot, of Princeton, was awarded a "Medal of Progress" at the Vienna Exposition for his series of geographies and wall maps. We believe that no other author, American or foreign, was so highly honored.

—— The superintendent of public schools of Cleveland, Ohio, receives a salary of $4,000; of Cincinnati, $3,500; of Columbus, $3,000; of Toledo, $3,000; of Akron, $2,500; of Sandusky, $2,500; and of Salem, $2,500. The State Commissioner of Common Schools receives a salary of only $2,000.

—— The unexpected dimunition of $241,858 in the school fund of Kentucky this year, due to a diminished *per capita* tax, has not only caused a reduction in the wages of teachers, but has also resulted in the closing of a number of schools. The available fund this year is only $1.60 for each child of school age.

—— The attendance of fifteen Brazillian students at Cornell University is one of the results of the exploration in Brazil by Professor Charles Fred Hartt. They are publishing a monthly journal in the Portuguese language, containing educational and other news of this country, and intended particularly for circulation in Brazil.

—— Prof. E. H. Cook, of the Columbus High School, read a paper on moral instruction before the Pensylvania Teacher's Association at its meeting in Pittsburg. The paper is published in the *Pennsylvania School Journal*, and we have read it with much interest and satisfaction. The views are sound, we believe, and the spirit excellent.

—— An interesting feature of the late Erie County Fair, Ohio, was an exhibition of the drawing in the Sandusky schools, under the direction of Prof. L. S. Thompson. Several hundred drawing papers, including those from all the grades, were exhibited. They indicated very great progress.

—— School Commissioner Harvey has attended a large number of the institutes held in Ohio this year, rendering valuable assistance. His public addresses are highly commended by the press. An eminent educator who heard him at a recent institute, writes: "Commissioner Harvey is capital—all sense and no nonsense. No teacher can hear him without benefit."

——President Leedo, of Mexico, has issued a proclamation announcing the adoption of the constitutional provision entirely separating church and state, perfect religious freedom, marriage a civil contract, and the abolition of the religious oath. Public education is now under the exclusive supervision of the state, and it will not be long before Mexico will have a public school system.

——President Andrews, of Marietta College, calls our attention to a typographical error in our notice last month of his article on "The Use of Titles." The expression "Rev. Mr. Stone, D.D.", which he would not use, should be *Rev. M. Stone, D.D.* He also calls attention to the expression "Rev. Maxwell, D.D.", used by a correspondent in the same number, and asks, "Why not say *Rev. Dr. Maxwell?*"

—— In emptying a "pigeon hole" in our desk we are reminded of our indebtedness to Supt. Binford, of Richmond, Va., and Dep'y Supt. Swett, of San Francisco, for complete sets of the questions used in the annual examination of the public schools of these cities. The questions in each case cover nearly the entire course of instruction. Mr. Swett has also sent us a set of the questions used in the special examination of teachers at the City Evening Normal School.

——The new scientific Hall, of Lafayette College, Easton, Pa., was dedicated on the 20th of Octeber. The total cost of the building was $360,000. The first floor is devoted mainly to mining and metallurgy; the second contains geological and mineralogical cabinets, a spacious hall, lecture rooms, etc.; the third is to be used for the engineers' department; and the fourth for the chemical department. The scientific department was founded by Mr. Pardee, with a fund of $200,000.

—— Mr. Gerritt Smith, of New York, has writtn a letter in which he argues that it is an "impertinence" for the state to meddle with the church or the school, and predicts "the approaching downfall of the state school." He thinks the catholics are cruelly oppressed by the school system. He also vigorously protests against compulsory education, claiming that the system can only harmonize with a despotic government. Mr. Smith may be a sage, but neither wisdom nor the public-school system will die with him.

—— At the recent election in Illinois thirty-four ladies, in thirty counties, ran for the office of county superintendent of schools, and eleven were successful—in several cases over other female candidates, and in one case over two male and two female candidates. Eleven of the candidates were married ladies, five of whom were elected. The election was held under the new law making women eligible to any school office.

—— The last Circular of Information of the National Bureau of Education (No. 4) gives a catalogue of the works of college professors and of members of learned and scientific societies in the United States, published in the five years from 1867 to 1873. The Commissioner wishes to correct and complete this Catalogue for the Centennial Exposition in Philadelphia in 1876, and, to this end, he desires to be informed of omissions and needed changes. We notice several omissions, including the works of Prof. Schuyler, of Baldwin University, Ohio.——The Bureau is preparing an extensive record of education in foreign countries, based on authoritative reports.

—— A large mass meeting was recently held at Cooper Union, New York, to give public expression against the diversion of any part of the school fund to the support of sectarian or denominational schools. The resolutions adopted are not only a strong protest against such diversion of school funds, but they favor compulsory education, and the incorporating of the principles of the common-school system in the *Constitution of the United States*, thus making the system "national" as well as placing it "beyond the reach of its enemies." We think the meeting made a mistake in invoking the protection of the Constitution of the United States. In our judgment the common-school system does not need such protection.

——At the recent opening of the new hall of Michigan University, President White, of Cornell University, made an address in which he expressed surprise that President Eliot, of Harvard, should advocate the doctrine that government should not provide for higher education. He stated that Harvard University was first developed by state grants, and has since been repeatedly assisted in this way, and yet, with this help, it has taken Harvard two hundred years to attain its present position. He reviewed at considerable length the common arguments against state universities, and maintained that it is the true policy of the state to make provision for higher instruction.

Oberlin College.—The annual catalogue for the college year 1873-'74 shows an attendance of 1,371 students in the several departments, as follows; theological, 46; college, 139; scientific, 48; ladies', 166; preparatory, 242; conservatory of music, 307; number counted twice, 118. This is, we believe, the largest attendance in the history of the institution. A large number of the students in the preparatory department are teachers or are preparing to teach, and a special teachers' institute for their benefit is held each fall term. This institute or normal course includes special instruction in the common branches, with practical lec-

tures on teaching by professors in Oberlin College and other leading educators. School Commissioner Harvey gave one of the lectures of this fall's course. Oberlin richly deserves its increasing prosperity.

Missouri.—Reports from several of the smaller cities show that the opposition to public schools, based on prejudice, partly due to ignorance of their character, is being overcome by their success. Macon may be taken as an illustration. It has an efficient board of education, composed of true friends of the system, who, to a man, stand by it. The schools are in charge of Mr. A. E. Wardner, formerly of Parkersburg, W. Va., an energetic teacher and a live superintendent, who receives a salary of $1,600. Last year language lessons and vocal music were added to the course, and this year a beginning has been made in drawing, natural science, and morals and manners. All this progress has been made without serious opposition, and with increasing popularity.

St. Louis.—The system of public schools in this great city of the West has been even more prosperous than the city itself. While the population in the thirty years ending in 1871 increased from 20,826 to 325,000, the number of pupils in the public schools increased from 350 to 31,087, and in private schools from 700 to 17,500, as estimated. Only five per cent of the entire population was in school in 1841, while in 1871 the per cent was fifteen. The number of pupils enrolled in both day and evening schools last year was 38,078, and the increase of enrollment for the past six years was 21,125—an annual average of about 3,500. There are now 65 large schools, including a central high school and five branch high schools, and 652 teachers for the day schools and 85 for the evening schools. The public school library contains about 30,000 volumes and has over 4,000 members. The city tax for the support of schools is four mills on the dollar. The fact that Supt. Harris is at the head of the system, is a guaranty that its popularity and prosperity are both well deserved.

Illinois.—The annual report of the Peoria County Normal School, Prof. S. H. White, principal, shows an enrollment of one hundred and fourteen, representing the different townships in the county. Only six were from other counties and states. The number of graduates in the full course was six. The records of the county superintendent show that fifty per cent of those receiving certificates to teach in the county in 1872 had been pupils in the school, and ninety of the pupils taught in the county last year. The report states that the salutary influence of the institution on the public schools of the county is seen in the greater permanence of teachers; in the fact that teaching is becoming more and more a distinct business for which special preparation is made; and in a better acquaintance among teachers, with more interest in each other's success, and more profiting by each other's experience. It is, of course, difficult to decide to what extent these results are due to the normal school, but it has unquestionably contributed largely to them. We wish that every county in the Union had such an institution, but we have no expectation that the system of county normal schools will be generally adopted.

BOOK NOTICES.

Our shelves contain more than one hundred books, chiefly text-books, which are waiting for examination and notice. They have been announced, from time to time, under "New Books Received," and we expect to review many of them, but publishers must be patient. Their enterprise is too great for one editor.

THE SCHOOL STAGE. A Collection of Juvenile Acting Plays. By W. H. VENABLE. Cincinnati and New York: Wilson, Hinkle & Co.

We are not a believer in school theatricals but, fortunately for the esteemed author of this work, we probably do not represent in this particular the majority of teachers. But notwithstanding our objections to the interruption of legitimate school work by exciting preparations for dramatic performances, we can most heartily commend "The School Stage" to all who *wish* to procure acting dialogues, suitable for school exhibitions. The pieces are varied in subject and style; moral and elevated in sentiment and tendency; and free from coarseness and rude buffoonery. The suggestions in the introduction and the directions and illustrations which accompany the plays, will greatly assist in their proper presentation. The work is published in handsome style.

SPENCERIAN SYSTEM OF PENMANSHIP. In Six Numbers. New York: Ivison, Blakeman, Taylor & Co.

The revised edition of this popular series of copy books shows that neither the authors nor the publishers intend to permit the Spencerian to take second rank in simplicity, accuracy, beauty, or complete adaptation to the wants of public schools. The finely graded copies present the incomparable Spencerian style of writing and they are accompanied by adequate instructions, printed over them and on the cover. The spacing and ruling show clearly the form, slant, and proportions of the letters, making the pupil's progress easy. The series is accompanied by an unique "Tracing Book," containing all the small letters, capitals, and figures printed in colors. But we forbear the attempt to specify all the improved features which characterize these excellent books.

THE INDUSTRIAL DRAWING SERIES: An Elementary Work in Four Numbers; accompanied by a Manual of Explanations, Principles and Problems for Practice, called THE DRAWING GUIDE. By MARCIUS WILSON, author of School and Family Series of Readers, "Manual of Instruction in Object Lessons", &c. New York: Harper & Brothers.

We have looked over this new series of drawing books and the accompanying manual with much interest. Number I of the drawing books is devoted to Decorative Design, the copies being chiefly selected from the best examples of decorative art, and Numbers II, III and IV illustrate a new method of representing objects, devised by the author and called "Cabinet Perspective." The copies embrace both plain and curvilinear solids in almost every variety of form and position. The drawings which are to be copied are placed in all the numbers on a full page, printed with fine vertical and horizontal lines respectively one-eighth of an inch apart, and the opposite page, to be used by the pupil, is similarly ruled with

pink lines. This ruling is a characteristic feature of the books. It enables the pupil to make an accurate copy of the models, and also to design new patterns and models with facility. The author claims that "the vast variety of decorative designs which we find among the remains of Egyptian, Grecian, Roman, Byzantine, and Arabian art, was formed upon paper, or papyrus, ruled by pencil in this identical manner, although not on the scale which we have used." This system of ruling certainly makes the pupil's task easy, and especially if he be permitted to draw straight lines by the aid of a ruler and curved lines by the aid of compasses.

"The Drawing Guide" is a neat 8mo. book of 220 pages. It presents a very full explanation of the system embodied in the drawing books, with an introductory chapter on the principles and practice of ornamental art, and an explanation of Isometrical Perspective, with numerous plates, in the appendix.

We commend these original works to all who are interested in industrial drawing, though we are not sufficiently familiar with the subject to express an intelligent opinion of their merits.

—— We have received through Messrs. Randall & Aston, Columbus, O., several numbers of *The American Naturalist*, a popular illustrated magazine of Natural History, published by the Peabody Academy of Natural Science, Salem, Mass. ($4.00 a year), and also Nos. 6, 7 and 8 of *Half-Hour Recreations in Popular Science*, published by Estes & Lauriat, Boston, Mass. No. 8 contains a lecture "On Yeast, Protoplasm and the Germ Theory" by Thomas H. Huxley, F.R.S., and a lecture on "The Relations Between Matter and Force" by John H. Tice, of St. Louis. Messrs. Estes & Lauriat are also special agents for *The American Naturalist*.

—— We call special attention to the advertisements in this number of *The Living Age*, *Harper's Magazine*, *Harper's Bazar*, *The Galaxy*, *Lippincott's Magazine*, *Atlantic Monthly*, *Our Young Folks*, *Every Saturday*, *North American Review*, and *The Popular Science Monthly*. They are all excellent periodicals. We also call attention to the other advertisements, most of which represent the leading publishing houses and the best textbooks now used in American schools.

—— An Associate Press telegram from Boston announces that Messrs. James R. Osgood & Co, have sold the *Atlantic Monthly*, *Every Saturday* and *North American Review* to Messrs. Hurd & Houghton, of New York, who will continue the publications in their present style, and under the present editorial management. *Our Young Folks* is to be transferred to Messrs. Scribner & Co., and will be merged into the new *St. Nicholas*.

—— We will furnish The National Teacher for 1874 and *Littell's Living Age* for $8.00; the Teacher and *Lippincott's Magazine* for $4.00; the Teacher and the *College Courant* for $3.50; for $2.25 we will furnish the Teacher and any one of the School Journals whose subscription price is $1.50.

NEW BOOKS RECEIVED.

THE FIRST READER and THE SECOND READER. By Lewis B. Monroe. Philadelphia: Cowperthwait & Co. Price, 30 and 50 cts.

ELEMENTARY ALGEBRA. By D. B. Hagar, Ph. D. Philadelphia: Cowperthwait & Co. Price, $1.25.

PATTERSON'S SPELLER AND ANALYZER, adapted to Written Lessons and accompanied by an EXERCISE BOOK. By Calvin Patterson. New York: Sheldon & Co. Price, 40 cts.; Exercise Book, 50 cts.

A SCHOOL MANUAL OF ENGLISH ETYMOLOGY, AND TEXT-BOOK OF DERIVATIVES, PREFIXES AND SUFFIXES. With Numerous Exercises for the Use of Schools. By Epes Sargent. Philadelphia: J. H. Butler & Co.

CHOICE TRIOS FOR FEMALE VOICES; intended for Seminaries, High and Normal Schools, and Vocal Classes. Selected and arranged by W. S. Tilden. Boston: O. Ditson & Co.

SPENCERIAN COPY BOOKS. Numbers 1, 2, 3, 4, 4½ and 5. Accompanied by a Tracing Book. New York: Ivison, Blakeman, Taylor & Co.

LANGUAGE LESSONS: An Introductory Grammar and Composition for Primary and Intermediate Grades. By William Swinton, A.M. New York: Harper & Brothers. Price, 50 cents.

WILD THOUGHTS IN RHYME. By Arnold Isler. Columbus: Smythe & Co. Price, $1.50.

THE INDUSTRIAL DRAWING SERIES. In Four Numbers. By Marcius Willson. New York: Harper & Brothers.

THE DRAWING GUIDE. A Manual to accompany the "Industrial Drawing series." By Marcius Willson. New York: Harper & Brothers.

LESSONS ON POLITICAL ECONOMY: Designed as a Basis for Instruction in that Science in Schools and Colleges. By J. T. Champlain, President of Colby University. New York: A. S. Barnes & Co. Price $1.25.

The County Teacher.—The only cheap Manual published for ungraded schools. Rational and practical. As a primary teacher, the author does not acknowledge a superior among living teachers. The COUNTRY TEACHER will be sent, post-paid, to any address, on receipt of Twenty-Five Cents. To Superintendents, for use of Teachers, **$2,00 per Dozen.** Address: JONATHAN HUNT, MONROEVILLE, O.

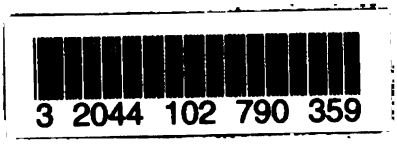
H. H. H. HUNTER'S HELPS TO HISTORY, or Historic Cards. Twenty Games sent by mail for 75 cts. Address: D. ECKLEY HUNTER, Princeton, Indiana. ☞ See advertisement in April number of this journal.

St. NICHOLAS: The New Magazine.

St. Nicholas has Come Again.

Here he is more bright and beautiful than before; the Prince of all Magazines for Children. He has grown since last month, in size and character. The first number delighted all the young folks. ST. NICHOLAS for December is still finer, and for January,—Ah! the holiday number—no boys and girls ever saw such a Magazine as that will be.

ST. NICHOLAS has the most beautiful pictures,—it is full of sterling good reading matter and hearty and innocent fun. It is to have two splendid Serial Stories; one for Boys, and the other for Girls, and, well —we are not going to tell you anything more. It is for sale by all the *News Dealers* and *Book-sellers*, who will gladly show it to you. Price, $3 a year: $1 for four months: 25cts. a number. Special terms to Schools nd School Teachers. **SCRIBNER & CO., 654 Broadway, N. Y.**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